

8/24/05

T. Gibbs

09/14/06

SID 16

## SCORE OVER LENGTH SEARCHES

Attached is a score over length search. This search was developed to overcome limitations in most standard search systems which favor large sequences with high scoring, but lesser overall identity over smaller sequences with higher overall identity. This search is especially useful for relatively small nucleic acid or polypeptide target sequences (antisense, fragments, probes, primers, RNAi, epitopes, haptens, etc.) claimed functionally via a form of hybridization and/or identity language and having defined upper and lower polynucleotide and or polypeptide length limits.

The score over length search is performed by first running the query sequence using examiner-specified identity and polynucleotide or protein length limit parameters, and saving 65,000 hits and 0 alignments from each desired database. The resulting output is reformatted using a Microsoft Word macro and is imported into Excel. The summary table data are then sorted by the ratio of score of each hit sequence divided by its length and the accession numbers for all hits below the examiner's desired score over length parameters are deleted. The remaining accession numbers are used to pull the corresponding sequences from the databases into subdatabases enriched for good hits and the query sequence is re-run against these subdatabases to yield the final results.

The score over length cutoff for this search is 75%

Examiner Please Note: This cover sheet should be included when submitting results to be scanned.

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161786

From: Gibbs, Terra  
Sent: Monday, August 08, 2005 12:05 PM  
To: STIC-Biotech/ChemLib  
Subject: sequence search request...

I have another request for a score over length search:

I need a length limited nucleotide sequence search of SEQ ID NO:16 in USSN 09/436,060, where the returns are rank ordered based on the score over length/ratio as we've discussed. I need the lengths limited to hits between 8 and 80 nucleotides, and I'll take as many hits as you can import into excel (64,000?), and alignments for anything above .75 on the above ratio. Hope this is clear, please call me if it's not. I also need the interference databases searched.

Terra Cotta Gibbs, Ph.D.  
Art Unit 1635  
Remsen Building 2D10  
Mailbox 2C18  
571-272-0758

\*\*\*\*\*

## STAFF USE ONLY

Searcher: \_\_\_\_\_  
Searcher Phone: 2-\_\_\_\_\_  
Date Searcher Picked up: \_\_\_\_\_  
Date Completed: \_\_\_\_\_  
Searcher Prep/Rev. Time: \_\_\_\_\_  
Online Time: \_\_\_\_\_

\*\*\*\*\*

## Type of Search

NA#: \_\_\_\_\_ AA#: \_\_\_\_\_  
Interference: \_\_\_\_\_ SPDI: \_\_\_\_\_  
S/L: \_\_\_\_\_ Oligomer: \_\_\_\_\_  
Encode/Transl: \_\_\_\_\_  
Structure#: \_\_\_\_\_ Text: \_\_\_\_\_  
Inventor: \_\_\_\_\_ Litigation: \_\_\_\_\_

\*\*\*\*\*

## Vendors and cost where applicable

STN: \_\_\_\_\_  
DIALOG: \_\_\_\_\_  
QUESTEL/ORBIT: \_\_\_\_\_  
LEXIS/NEXIS: \_\_\_\_\_  
SEQUENCE SYSTEM: \_\_\_\_\_  
WWW/Internet: \_\_\_\_\_  
Other(Specify): \_\_\_\_\_

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GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 14:20:26 ; Search time 2 Seconds  
(without alignments)  
3.144 Million cell updates/sec

Title: US-09-436-060A-16

Perfect score: 451

Sequence: 1 99gttgagggtggcct.....aggactggctcacacatgc 451

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 0.5

Searched: 295 seqs, 6972 residues

Total number of hits satisfying chosen parameters: 590

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 309 summaries

Database : rge.subdb:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	54	12.0	62	1	AR154151
2	54	12.0	66	1	AR154150
3	46.2	10.2	51	1	BD225879
4	46.2	10.2	51	1	BD225880
5	46.2	10.2	51	1	AX019628
6	46.2	10.2	51	1	AX019629
7	43	9.5	51	1	BD225882
8	43	9.5	51	1	AX019631
9	41.4	9.2	51	1	BD225881
10	41.4	9.2	51	1	AX019630
11	38.2	8.5	51	1	BD225883
12	38.2	8.5	51	1	AX019632
13	36	8.0	38	1	BD225837
14	36	8.0	38	1	AX019586
15	31.2	6.9	38	1	BD225838
16	31.2	6.9	38	1	BD225839
17	31.2	6.9	38	1	AX019587
18	31.2	6.9	38	1	AX019588
19	31	6.9	31	1	AR279616
20	31	6.9	31	1	AR305067
21	31	6.9	31	1	BD071082
22	30	6.7	30	1	AR016054
23	30	6.7	30	1	AR059215
24	30	6.7	30	1	AR063829
25	30	6.7	30	1	AR063832
26	30	6.7	30	1	AR075526
27	30	6.7	30	1	AR161924
28	30	6.7	30	1	BD176165
29	30	6.7	30	1	I31769
30	30	6.7	30	1	AR279619
31	30	6.7	30	1	AR279620
32	30	6.7	30	1	AR305070
33	30	6.7	30	1	AR305071
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1	54	12.0	62	1	AR154151
2	54	12.0	66	1	AR154150
3	46.2	10.2	51	1	BD225879
4	46.2	10.2	51	1	BD225880
5	46.2	10.2	51	1	AX019628
6	46.2	10.2	51	1	AX019629
7	43	9.5	51	1	BD225882
8	43	9.5	51	1	AX019631
9	41.4	9.2	51	1	BD225881
10	41.4	9.2	51	1	AX019630
11	38.2	8.5	51	1	BD225883
12	38.2	8.5	51	1	AX019632
13	36	8.0	38	1	BD225837
14	36	8.0	38	1	AX019586
15	31.2	6.9	38	1	BD225838
16	31.2	6.9	38	1	BD225839
17	31.2	6.9	38	1	AX019587
18	31.2	6.9	38	1	AX019588
19	31	6.9	31	1	AR279616
20	31	6.9	31	1	AR305067
21	31	6.9	31	1	BD071082
22	30	6.7	30	1	AR016054
23	30	6.7	30	1	AR059215
24	30	6.7	30	1	AR063829
25	30	6.7	30	1	AR063832
26	30	6.7	30	1	AR075526
27	30	6.7	30	1	AR161924
28	30	6.7	30	1	BD176165
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31	30	6.7	30	1	AR279620
32	30	6.7	30	1	AR305070
33	30	6.7	30	1	AR305071

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C 35	30	6.7	30	1	AR373060
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C 37	30	6.7	30	1	BD023701
C 38	30	6.7	30	1	BD023704
C 39	29	6.4	30	1	A84595
C 40	29	6.4	30	1	A84596
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C 48	28.4	6.3	30	1	AR279618
C 49	28.4	6.3	30	1	AR305069
C 50	28	6.2	28	1	AR370168
C 51	27.4	6.1	30	1	A84594
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C 55	27	6.0	27	1	AX317989
C 56	27	6.0	27	1	BD023722
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C 62	26.4	5.9	28	1	BD176174
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C 128	24	5.3	25	1	BD131326	ACCESSION:BD131326	C 201	18	4.0	18	1	BD196339	ACCESSION:BD196339
C 129	23	5.1	23	1	BD071059	ACCESSION:BD071059	C 202	18	4.0	18	1	BD071043	ACCESSION:BD071043
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C 136	22	4.9	22	1	AR075545	ACCESSION:AR075545	C 209	16.4	3.6	18	1	AR393284	ACCESSION:AR393284
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C 139	22	4.9	22	1	BD176151	ACCESSION:BD176151	C 212	16.2	3.6	21	1	BD196340	ACCESSION:BD196340
C 140	22	4.9	22	1	BD176173	ACCESSION:BD176173	C 213	16.2	3.6	21	1	AR193717	ACCESSION:AR193717
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C 143	22	4.9	22	1	AR279617	ACCESSION:AR279617	C 216	16	3.5	20	1	AX019563	ACCESSION:AX019563
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C 146	22	4.9	22	1	AR306490	ACCESSION:AR306490	C 219	15.2	3.4	20	1	AR199735	ACCESSION:AR199735
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C 150	21	4.7	21	1	AR161927	ACCESSION:AR161927	C 223	15	3.3	15	1	BD071036	ACCESSION:BD071036
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C 153	21	4.7	21	1	AR306475	ACCESSION:AR306475	C 226	15	3.3	15	1	BD071078	ACCESSION:BD071078
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C 164	20	4.4	20	1	AR063831	ACCESSION:AR063831	C 237	13.8	3.1	17	1	AR196361	ACCESSION:AR196361
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C 168	20	4.4	20	1	AR079894	ACCESSION:AR079894	C 241	13.8	3.1	17	1	AX423613	ACCESSION:AX423613
C 169	20	4.4	20	1	AR161909	ACCESSION:AR161909	C 242	13.8	3.1	17	1	AX429297	ACCESSION:AX429297
C 170	20	4.4	20	1	BD176149	ACCESSION:BD176149	C 243	13.8	3.1	17	1	AX688082	ACCESSION:AX688082
C 171	20	4.4	20	1	BD176152	ACCESSION:BD176152	C 244	13.8	3.1	17	1	AX728175	ACCESSION:AX728175
C 172	20	4.4	20	1	BD225812	ACCESSION:BD225812	C 245	13.8	3.1	18	1	AR196106	ACCESSION:AR196106
C 173	20	4.4	20	1	BD225842	ACCESSION:BD225842	C 246	13.8	3.1	38	1	BD225837	ACCESSION:BD225837
C 174	20	4.4	20	1	I31751	ACCESSION:I31751	C 247	13.8	3.1	38	1	AX019586	ACCESSION:AX019586
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C 177	20	4.4	20	1	AR306488	ACCESSION:AR306488	C 250	13.4	3.0	17	1	AX272860	ACCESSION:AX272860
C 178	20	4.4	20	1	AX019561	ACCESSION:AX019561	C 251	13.4	3.0	17	1	AX273288	ACCESSION:AX273288
C 179	20	4.4	20	1	AX019591	ACCESSION:AX019591	C 252	13.4	3.0	17	1		

AUTHORS Roninson, I.B. and Grossman, A.  
TITLE Compositions, methods and kits for identifying naturally occurring RNA sequences having affinity for RNA-binding proteins  
JOURNAL Patent: US 6238867-A 16 29-MAY-2001;  
FEATURES Location/Qualifiers  
source 1..62  
/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 12.0%; Score 54; DB 1; Length 62;  
Best Local Similarity 100.0%; Pred. No. 1.4;  
Matches 54; Conservative 0; Mismatches 0; Indels 0; Gaps 0

QY 1 GGGTTGCGAGGGTGGCCCTGGAGGGTGGTGGCCATTTTGTCTAAACCCCTA 54  
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DB 61 GGGTTGCGAGGGTGGCCCTGGAGGGTGGTGGCCATTTTGTCTAAACCCCTA 8  
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RESULT 2  
AR154150  
LOCUS AR154150  
DEFINITION Sequence 15 from patent US 6238867.  
ACCESSION AR154150  
VERSION AR154150.1 GI:15122203  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 66)  
AUTHORS Roninson, I.B. and Grossman, A.  
TITLE Compositions, methods and kits for identifying naturally occurring RNA sequences having affinity for RNA-binding proteins  
JOURNAL Patent: US 6238867-A 15 29-MAY-2001;  
FEATURES Location/Qualifiers  
source 1..66  
/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 12.0%; Score 54; DB 1; Length 66;  
Best Local Similarity 100.0%; Pred. No. 1.5;  
Matches 54; Conservative 0; Mismatches 0; Indels 0; Gaps 0

QY 1 GGGTTGCGAGGGTGGCCCTGGAGGGTGGTGGCCATTTTGTCTAAACCCCTA 54  
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DB 6 GGGTTGCGAGGGTGGCCCTGGAGGGTGGTGGCCATTTTGTCTAAACCCCTA 59  
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RESULT 3  
BD225879  
LOCUS BD225879  
DEFINITION Promoter region of mouse and human telomerase RNA component genes.  
ACCESSION BD225879  
VERSION BD225879.1 GI:33035649  
KEYWORDS synthetic construct  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 51)  
AUTHORS Keith, W.N.  
TITLE Promoter region of mouse and human telomerase RNA component genes  
JOURNAL Patent: JP 2002509699-A 82 02-APR-2002;  
COMMENT CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD  
OS Artificial Sequence  
PN JP 2002509699-A/82  
PD 02-APR-2002  
PF 29-JAN-1999 JP 2000529424  
PR 29-JAN-1998 GB 9801902.9  
PI WILLIAM NICOL KEITH  
PC C12N15/09, A61K31/7105, A61K31/711, A61K35/76, A61K38/00, A61K45/00, PC A61K48/00,  
PC A61P35/00, C12N1/15, C12N1/19, C12N1/21, C12N5/10, C12P21/02 PC  
, C12Q1/68//C12N9/12,

PC (A61K35/76,A61K31:522),C12N15/00,A61K37/02,C12N5/00 CC  
Description of Artificial Sequence: Mutant construct FH Key

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Location/Qualifiers  
/organism='Artificial Sequence'.  
1..51  
Location/Qualifiers  
/organism='synthetic construct'  
/mol\_type='genomic DNA'  
/db\_xref='taxon:32630'

Query Match 10.2%; Score 46.2; DB 1; Length 51;  
Best Local Similarity 94.1%; Pred. No. 4.2;  
Matches 48; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 GGGTTGGGAGGGTGGGCGCTGGGAGGGGTGGTGCCATTTTGTCTAACCC 51  
|||||  
Db 1 GGGTTGGGAAAAATGGGCGCTGGGAGGGGTGGTGCCATTTTGTCTAACCC 51  
|||||

RESULT 4  
BD225880  
LOCUS AX019628 51 bp DNA linear PAT 17-JUL-2003  
DEFINITION Promoter region of mouse and human telomerase RNA component genes.  
ACCESSION BD225880  
VERSION BD225880.1 GI:33035650  
KEYWORDS JP 2002509699-A/83.  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 51)  
AUTHORS Keith,W.N.  
TITLE Promoter region of mouse and human telomerase RNA component genes  
JOURNAL Patent: JP 2002509699-A 83 02-APR-2002;  
COMMENT CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD  
OS Artificial Sequence  
PN JP 2002509699-A/83  
PD 02-APR-2002  
PF 29-JAN-1999 JP 2000529424  
PR 29-JAN-1998 GB 9801902.9  
PI WILLIAM NICOL KEITH  
PC C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00, PC  
A61K48/00,  
PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC  
C12O1/68/C12N9/12  
PC (A61K35/76,A61K31:522),C12N15/00,A61K37/02,C12N5/00 CC  
Description of Artificial Sequence: Mutant construct FH Key

FT source 1..51  
Location/Qualifiers  
/organism='Artificial Sequence'.  
1..51  
Location/Qualifiers  
/organism='synthetic construct'  
/mol\_type='genomic DNA'  
/db\_xref='taxon:32630'

Query Match 10.2%; Score 46.2; DB 1; Length 51;  
Best Local Similarity 94.1%; Pred. No. 4.2;  
Matches 48; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 GGGTTGGGAGGGTGGGCGCTGGGAGGGGTGGTGCCATTTTGTCTAACCC 51  
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Db 1 GGGTTGGGAGGGTGGGCGCTGGGAGGGGTGGTGCCATTTTGTCTAACCC 51  
|||||

RESULT 5  
AX019628  
LOCUS AX019628 51 bp DNA linear PAT 07-SEP-2000  
DEFINITION Sequence 82 from Patent WO9938964.  
ACCESSION AX019628  
VERSION AX019628.1 GI:10043542  
KEYWORDS

SOURCE synthetic construct  
ORGANISM synthetic construct  
REFERENCE other sequences; artificial sequences.  
1  
AUTHORS Keith,W.N.  
TITLE Promoter regions of the mouse and human telomerase rna component genes  
JOURNAL Patent: WO 9938964-A 82 05-AUG-1999;  
KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)  
FEATURES Location/Qualifiers  
source 1..51  
/organism='synthetic construct'  
/mol\_type='unassigned DNA'  
/db\_xref='taxon:32630'  
/note='Mutant construct'

Query Match 10.2%; Score 46.2; DB 1; Length 51;  
Best Local Similarity 94.1%; Pred. No. 4.2;  
Matches 48; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 GGGTTGGGAGGGTGGGCGCTGGGAGGGGTGGTGCCATTTTGTCTAACCC 51  
|||||  
Db 1 GGGTTGGGAAAAATGGGCGCTGGGAGGGGTGGTGCCATTTTGTCTAACCC 51  
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RESULT 6  
AX019629  
LOCUS AX019629 51 bp DNA linear PAT 07-SEP-2000  
DEFINITION Sequence 83 from Patent WO9938964.  
ACCESSION AX019629  
VERSION AX019629.1 GI:10043543  
KEYWORDS  
SOURCE synthetic construct  
ORGANISM synthetic construct  
REFERENCE other sequences; artificial sequences.  
1  
AUTHORS Keith,W.N.  
TITLE Promoter regions of the mouse and human telomerase rna component genes  
JOURNAL Patent: WO 9938964-A 83 05-AUG-1999;  
KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)  
FEATURES Location/Qualifiers  
source 1..51  
/organism='synthetic construct'  
/mol\_type='unassigned DNA'  
/db\_xref='taxon:32630'  
/note='Mutant construct'

Query Match 10.2%; Score 46.2; DB 1; Length 51;  
Best Local Similarity 94.1%; Pred. No. 4.2;  
Matches 48; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 GGGTTGGGAGGGTGGGCGCTGGGAGGGGTGGTGCCATTTTGTCTAACCC 51  
|||||  
Db 1 GGGTTGGGAGGGTGGGCGCTGGGAGGGGTGGTGCCATTTTGTCTAACCC 51  
|||||

RESULT 7  
BD225882  
LOCUS BD225882 51 bp DNA linear PAT 17-JUL-2003  
DEFINITION Promoter region of mouse and human telomerase RNA component genes.  
ACCESSION BD225882  
VERSION BD225882.1 GI:33035652  
KEYWORDS JP 2002509699-A/85.  
SOURCE synthetic construct  
ORGANISM synthetic construct  
REFERENCE other sequences; artificial sequences.  
1 (bases 1 to 51)  
AUTHORS Keith,W.N.  
TITLE Promoter region of mouse and human telomerase RNA component genes  
JOURNAL Patent: JP 2002509699-A 85 02-APR-2002;  
COMMENT CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD  
OS Artificial Sequence

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PN JP 2002509699-A/85
PD 02-APR-2002
PF 29-JAN-1999 JP 2000529424
PR 29-JAN-1998 GB 9801902.9
PI WILLIAM NICOL KEITH
PC
C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00, PC
A61K48/00,
PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC
,C12Q1/68//C12N9/12,
PC (A61K35/76,A61K31:522),C12N15/00,A61K37/02,C12N5/00 CC
Description of Artificial Sequence: Mutant construct FH Key
Location/Qualifiers
FT source 1..51
FT Location/Qualifiers
/organism='Artificial Sequence'.
FEATURES
source
1..51
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
Query Match 9.5%; Score 43; DB 1; Length 51;
Best Local Similarity 90.2%; Pred. No. 7.2;
Matches 46; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
Qy 1 GGGTTGCGAGGGTGGCGCTGGAGGGTGGTGGCCATTTTGTCTAAAC 51
|||||
Db 1 GGGTTGCGAGGGTGGCGCTGGTAAAGTAATGGCCATTTTGTCTAAAC 51
|||||
RESULT 8
AX019631
LOCUS
DEFINITION
ACCESSION AX019631
VERSION AX019631.1 GI:10043545
KEYWORDS
SOURCE
synthetic construct
ORGANISM
synthetic construct
other sequences; artificial sequences.
REFERENCE 1
AUTHORS
Keith,W.N.
TITLE
Promoter regions of the mouse and human telomerase rna component
genes
JOURNAL
Patent: WO 938964-A 85 05-AUG-1999;
KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)
FEATURES
source
1..51
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Mutant construct"
Query Match 9.5%; Score 43; DB 1; Length 51;
Best Local Similarity 90.2%; Pred. No. 7.2;
Matches 46; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
Qy 1 GGGTTGCGAGGGTGGCGCTGGAGGGTGGTGGCCATTTTGTCTAAAC 51
|||||
Db 1 GGGTTGCGAGGGTGGCGCTGGTAAAGTAATGGCCATTTTGTCTAAAC 51
|||||
RESULT 9
BD225881
LOCUS
DEFINITION
ACCESSION BD225881
VERSION BD225881.1 GI:33035651
KEYWORDS
JP 2002509699-A/84.
SOURCE
synthetic construct
ORGANISM
synthetic construct
other sequences; artificial sequences.
REFERENCE 1
(bases 1 to 51)
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AUTHORS
TITLE
Promoter region of mouse and human telomerase RNA component genes
JOURNAL
Patent: JP 2002509699-A 84 02-APR-2002;
CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD
COMMENT
OS Artificial Sequence
PN JP 2002509699-A/84
PD 02-APR-2002
PF 29-JAN-1999 JP 2000529424
PR 29-JAN-1998 GB 9801902.9
PI WILLIAM NICOL KEITH
PC
C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00, PC
A61K48/00,
PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC
,C12Q1/68//C12N9/12,
PC (A61K35/76,A61K31:522),C12N15/00,A61K37/02,C12N5/00 CC
Description of Artificial Sequence: Mutant construct FH Key
Location/Qualifiers
FT source 1..51
FT Location/Qualifiers
/organism='Artificial Sequence'.
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source
1..51
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
Query Match 9.2%; Score 41.4; DB 1; Length 51;
Best Local Similarity 88.2%; Pred. No. 9.4;
Matches 45; Conservative 0; Mismatches 6; Indels 0; Gaps 0;
Qy 1 GGGTTGCGAGGGTGGCGCTGGAGGGTGGTGGCCATTTTGTCTAAAC 51
|||||
Db 1 GGGTTGCGGAAAAATGGCGCTGGGTAAAGTGGTGGCCATTTTGTCTAAAC 51
|||||
RESULT 10
AX019630
LOCUS
DEFINITION
ACCESSION AX019630
VERSION AX019630.1 GI:10043544
KEYWORDS
SOURCE
synthetic construct
ORGANISM
synthetic construct
other sequences; artificial sequences.
REFERENCE 1
AUTHORS
Keith,W.N.
TITLE
Promoter regions of the mouse and human telomerase rna component
genes
JOURNAL
Patent: WO 938964-A 84 05-AUG-1999;
KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)
FEATURES
source
1..51
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Mutant construct"
Query Match 9.2%; Score 41.4; DB 1; Length 51;
Best Local Similarity 88.2%; Pred. No. 9.4;
Matches 45; Conservative 0; Mismatches 6; Indels 0; Gaps 0;
Qy 1 GGGTTGCGAGGGTGGCGCTGGAGGGTGGTGGCCATTTTGTCTAAAC 51
|||||
Db 1 GGGTTGCGGAAAAATGGCGCTGGGTAAAGTGGTGGCCATTTTGTCTAAAC 51
|||||
RESULT 11
BD225883
LOCUS
DEFINITION
ACCESSION BD225883
VERSION BD225883.1 GI:33035653
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KEYWORDS      JP 2002509699-A/86.
SOURCE         synthetic construct
ORGANISM       other sequences; artificial sequences.

REFERENCE
AUTHORS       Keith,W.N.
TITLE         Promoter region of mouse and human telomerase RNA component genes
JOURNAL       CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD
COMMENT       OS Artificial Sequence
              PN JP 2002509699-A/86
              PD 02-APR-2002
              PF 29-JAN-1999 JP 2000529424
              PR 29-JAN-1998 GB 9801902.9
              PI WILLIAM NICOL KEITH
              PC C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00, PC
                A61K48/00,
                PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC
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                PC (A61K35/76,A61K31:522),C12N15/00,A61K37/02,C12N5/00 CC
                Description of Artificial Sequence: Mutant construct FH Key
              Location/Qualifiers
              FT source 1..51
              FT Location/Qualifiers
              FT 1..51 /organism='Artificial Sequence'.

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Query Match      8.5%; Score 38.2; DB 1; Length 51;
Best Local Similarity 84.3%; Pred. No. 16;
Matches 43; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

Qy 1 GGGTTGCGAGGGTGGGCGCTGGAGGGGTGGTGCCATTTTGTCTAAAC 51
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Db 1 GGGTTGCGGAAAATGGGCGCTGGGTAGGTAATGCCCATTTTGTCTAAAC 51

RESULT 12
AX019632
LOCUS           51 bp DNA linear PAT 07-SEP-2000
DEFINITION     Sequence 86 from Patent WO938964.
ACCESSION     AX019632
VERSION       AX019632.1 GI:10043546
KEYWORDS       synthetic construct
SOURCE         synthetic construct
ORGANISM       other sequences; artificial sequences.

REFERENCE
AUTHORS       Keith,W.N.
TITLE         Promoter regions of the mouse and human telomerase rna component
JOURNAL       Patent: WO 938964-A 86 05-AUG-1999;
              KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)
FEATURES
source
Query Match      8.5%; Score 38.2; DB 1; Length 51;
Best Local Similarity 84.3%; Pred. No. 16;
Matches 43; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

Qy 1 GGGTTGCGAGGGTGGGCGCTGGAGGGGTGGTGCCATTTTGTCTAAAC 51
    |||||
Db 1 GGGTTGCGGAAAATGGGCGCTGGGTAGGTAATGCCCATTTTGTCTAAAC 51

RESULT 13
AX019632
LOCUS           51 bp DNA linear PAT 07-SEP-2000
DEFINITION     Sequence 86 from Patent WO938964.
ACCESSION     AX019632
VERSION       AX019632.1 GI:10043546
KEYWORDS       synthetic construct
SOURCE         synthetic construct
ORGANISM       other sequences; artificial sequences.

REFERENCE
AUTHORS       Keith,W.N.
TITLE         Promoter regions of the mouse and human telomerase rna component
JOURNAL       Patent: WO 938964-A 86 05-AUG-1999;
              KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)
FEATURES
source
Query Match      8.5%; Score 38.2; DB 1; Length 51;
Best Local Similarity 84.3%; Pred. No. 16;
Matches 43; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

Qy 1 GGGTTGCGAGGGTGGGCGCTGGAGGGGTGGTGCCATTTTGTCTAAAC 51
    |||||
Db 1 GGGTTGCGGAAAATGGGCGCTGGGTAGGTAATGCCCATTTTGTCTAAAC 51

RESULT 14
AX019586
LOCUS           38 bp DNA linear PAT 07-SEP-2000
DEFINITION     Sequence 40 from Patent WO938964.
ACCESSION     AX019586
VERSION       AX019586.1 GI:10043500
KEYWORDS       synthetic construct
SOURCE         synthetic construct
ORGANISM       other sequences; artificial sequences.

REFERENCE
AUTHORS       Keith,W.N.
TITLE         Promoter regions of the mouse and human telomerase rna component
JOURNAL       Patent: WO 938964-A 40 05-AUG-1999;
              KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)
FEATURES
source
Query Match      8.0%; Score 36; DB 1; Length 38;
Best Local Similarity 100.0%; Pred. No. 17;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GGGTTGCGAGGGTGGGCGCTGGAGGGGTGGTGCC 36
    |||||
Db 3 GGGTTGCGAGGGTGGGCGCTGGAGGGGTGGTGCC 38

BD225837
LOCUS           38 bp DNA linear PAT 17-JUL-2003
DEFINITION     Promoter region of mouse and human telomerase RNA component genes.
ACCESSION     BD225837
VERSION       BD225837.1 GI:33035607
KEYWORDS       synthetic construct
SOURCE         synthetic construct
ORGANISM       other sequences; artificial sequences.

REFERENCE
AUTHORS       Keith,W.N.
TITLE         Promoter region of mouse and human telomerase RNA component genes
JOURNAL       Patent: JP 2002509699-A 40 02-APR-2002;
              CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD
COMMENT       OS Artificial Sequence
              PN JP 2002509699-A/40
              PD 02-APR-2002
              PF 29-JAN-1999 JP 2000529424
              PR 29-JAN-1998 GB 9801902.9
              PI WILLIAM NICOL KEITH
              PC C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00, PC
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                PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC
                ,C12Q1/68//C12N9/12,
                PC (A61K35/76,A61K31:522),C12N15/00,A61K37/02,C12N5/00 CC
                Description of Artificial Sequence:Oligonucleotide FH Key
              Location/Qualifiers
              FT source 1..38
              FT /organism='Artificial Sequence'.

FEATURES
source
Query Match      8.0%; Score 36; DB 1; Length 38;
Best Local Similarity 100.0%; Pred. No. 17;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GGGTTGCGAGGGTGGGCGCTGGAGGGGTGGTGCC 36
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Db 3 GGGTTGCGAGGGTGGGCGCTGGAGGGGTGGTGCC 38

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Db 3 GGGTTGCGAGGGTGGGCTGGGAGGGTGGTGCC 38  
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BD225838 38 bp DNA linear PAT 17-JUL-2003  
LOCUS Promoter region of mouse and human telomerase RNA component genes.  
DEFINITION BD225838  
ACCESSION BD225838.1 GI:33035608  
VERSION JP 2002509699-A/41.  
KEYWORDS synthetic construct  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 38)  
AUTHORS Keith,W.N.  
TITLE Promoter region of mouse and human telomerase RNA component genes  
JOURNAL Patent: JP 2002509699-A 41 02-APR-2002;  
CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD  
COMMENT OS Artificial Sequence  
PN JP 2002509699-A/41  
PD 02-APR-2002  
PF 29-JAN-1999 JP 2000529424  
PR 29-JAN-1998 GB 9801902.9  
PI WILLIAM NICOL KEITH  
PC C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00, PC  
A61K48/00,  
PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC  
C12O1/68/C12N9/12,  
PC (A61K35/76,A61K31:522),C12N15/00,A61K37/02,C12N5/00 CC  
Description of Artificial Sequence:Oligonucleotide FH Key  
Location/Qualifiers  
FT source 1..38  
FT /organism='Artificial Sequence'.  
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source  
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/organism="synthetic construct"  
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Query Match 6.9%; Score 31.2; DB 1; Length 38;  
Best Local Similarity 91.7%; Pred.No.36;  
Matches 33; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Oy 1 GGGTTGCGAGGGTGGGCTGGGAGGGTGGTGCC 36  
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Db 3 GGGTTGCGAGGGTGGGCTGGGAGGGTGGTGCC 38  
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BD225839 38 bp DNA linear PAT 17-JUL-2003  
LOCUS Promoter region of mouse and human telomerase RNA component genes.  
DEFINITION BD225839  
ACCESSION BD225839.1 GI:33035609  
VERSION JP 2002509699-A/42.  
KEYWORDS synthetic construct  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 38)  
AUTHORS Keith,W.N.  
TITLE Promoter region of mouse and human telomerase RNA component genes  
JOURNAL Patent: JP 2002509699-A 42 02-APR-2002;  
CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD  
COMMENT OS Artificial Sequence  
PN JP 2002509699-A/42  
PD 02-APR-2002  
PF 29-JAN-1999 JP 2000529424  
PR 29-JAN-1998 GB 9801902.9  
PI WILLIAM NICOL KEITH  
PC C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00, PC  
C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00, PC  
A61K48/00,  
PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC  
C12O1/68/C12N9/12,  
PC (A61K35/76,A61K31:522),C12N15/00,A61K37/02,C12N5/00 CC  
Description of Artificial Sequence:Oligonucleotide FH Key  
Location/Qualifiers  
FT source 1..38  
FT /organism='Artificial Sequence'.  
FEATURES  
source  
1..38  
/organism="synthetic construct"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32630"  
Query Match 6.9%; Score 31.2; DB 1; Length 38;  
Best Local Similarity 91.7%; Pred.No.36;  
Matches 33; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Oy 1 GGGTTGCGAGGGTGGGCTGGGAGGGTGGTGCC 36  
|||||  
Db 3 GGGTTGCGAGGGTGGGCTGGGAGGGTGGTGCC 38  
|||||  
BD225839 38 bp DNA linear PAT 17-JUL-2003  
LOCUS Promoter region of mouse and human telomerase RNA component genes.  
DEFINITION BD225839  
ACCESSION BD225839.1 GI:33035609  
VERSION JP 2002509699-A/42.  
KEYWORDS synthetic construct  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 38)  
AUTHORS Keith,W.N.  
TITLE Promoter region of mouse and human telomerase RNA component genes  
JOURNAL Patent: JP 2002509699-A 42 02-APR-2002;  
CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD  
COMMENT OS Artificial Sequence  
PN JP 2002509699-A/42  
PD 02-APR-2002  
PF 29-JAN-1999 JP 2000529424  
PR 29-JAN-1998 GB 9801902.9  
PI WILLIAM NICOL KEITH  
PC C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00, PC  
C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00, PC  
A61K48/00,  
PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC  
C12O1/68/C12N9/12,  
PC (A61K35/76,A61K31:522),C12N15/00,A61K37/02,C12N5/00 CC  
Description of Artificial Sequence:Oligonucleotide FH Key  
Location/Qualifiers  
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1..38  
/organism="synthetic construct"  
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Best Local Similarity 91.7%; Pred.No.36;  
Matches 33; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Oy 1 GGGTTGCGAGGGTGGGCTGGGAGGGTGGTGCC 36  
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Db 3 GGGTTGCGAGGGTGGGCTGGGAGGGTGGTGCC 38  
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BD225839 38 bp DNA linear PAT 17-JUL-2003  
LOCUS Promoter region of mouse and human telomerase RNA component genes.  
DEFINITION BD225839  
ACCESSION BD225839.1 GI:33035609  
VERSION JP 2002509699-A/42.  
KEYWORDS synthetic construct  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 38)  
AUTHORS Keith,W.N.  
TITLE Promoter region of mouse and human telomerase RNA component genes  
JOURNAL Patent: JP 2002509699-A 42 02-APR-2002;  
CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD  
COMMENT OS Artificial Sequence  
PN JP 2002509699-A/42  
PD 02-APR-2002  
PF 29-JAN-1999 JP 2000529424  
PR 29-JAN-1998 GB 9801902.9  
PI WILLIAM NICOL KEITH  
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PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC  
C12O1/68/C12N9/12,  
PC (A61K35/76,A61K31:522),C12N15/00,A61K37/02,C12N5/00 CC  
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C12O1/68/C12N9/12,  
PC (A61K35/76,A61K31:522),C12N15/00,A61K37/02,C12N5/00 CC  
Description of Artificial Sequence:Oligonucleotide FH Key  
Location/Qualifiers  
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Best Local Similarity 91.7%; Pred.No.36;  
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Db 3 GGGTTGCGAGGGTGGGCTGGGTAAGGTGGTGCC 38  
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RESULT 17  
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LOCUS AX019587 38 bp DNA linear PAT 07-SEP-2000  
DEFINITION Sequence 41 from Patent WO9938964.  
ACCESSION AX019587  
VERSION AX019587.1 GI:10043501  
KEYWORDS synthetic construct  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1  
AUTHORS Keith,W.N.  
TITLE Promoter regions of the mouse and human telomerase rna component  
genes  
JOURNAL Patent: WO 9938964-A 41 05-AUG-1999;  
KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)  
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/db\_xref="taxon:32630"  
/note="Oligonucleotide"  
Query Match 6.9%; Score 31.2; DB 1; Length 38;  
Best Local Similarity 91.7%; Pred.No.36;  
Matches 33; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
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|||||  
Db 3 GGGTTGCGAGAAATGGGCTGGGAGGGTGGTGCC 38  
|||||  
RESULT 18  
AX019588  
LOCUS AX019588 38 bp DNA linear PAT 07-SEP-2000  
DEFINITION Sequence 42 from Patent WO9938964.  
ACCESSION AX019588  
VERSION AX019588.1 GI:10043502  
KEYWORDS synthetic construct  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1  
AUTHORS Keith,W.N.  
TITLE Promoter regions of the mouse and human telomerase rna component  
genes  
JOURNAL Patent: WO 9938964-A 42 05-AUG-1999;  
KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)  
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Location/Qualifiers

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/db_xref="taxon:32630"
/note="Oligonucleotide"

Query Match      6.9%; Score 31.2; DB 1; Length 38;
Best Local Similarity 91.7%; Pred. No. 36;
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Qy 1 GGGTTGGGAGGGTGGCCCTGGAGGGGTGGTGGCC 36
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Db 3 GGGTTGGGAGGGTGGCCCTGGAGGGGTGGTGGCC 38

RESULT 19
AR279616/c
LOCUS          AR279616          31 bp      DNA      linear      PAT 10-APR-2003
DEFINITION     Sequence 1 from patent US 6517834.
ACCESSION      AR279616
VERSION        AR279616.1 GI:29714510
KEYWORDS       Unknown.
SOURCE         Unknown.
ORGANISM       Unclassified.
REFERENCE      1 (bases 1 to 31)
AUTHORS        Weinrich,S.L., Atkinson,E.M. III, Lichtsteiner,S.P., Vasserot,A.P.
and Pruzan,R.A.
TITLE          Purified telomerase
JOURNAL        Patent: US 6517834-A 1 11-FEB-2003;
FEATURES       source
                1. .31
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Query Match      6.9%; Score 31; DB 1; Length 31;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGTCTAACCTTAAGGAGGCGGTAGGC 72
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Db 31 TTGTCTAACCTTAAGGAGGCGGTAGGC 1

RESULT 20
AR305067/c
LOCUS          AR305067          31 bp      DNA      linear      PAT 12-JUN-2003
DEFINITION     Sequence 1 from patent US 6545133.
ACCESSION      AR305067
VERSION        AR305067.1 GI:31694374
KEYWORDS       Unknown.
SOURCE         Unknown.
ORGANISM       Unclassified.
REFERENCE      1 (bases 1 to 31)
AUTHORS        Weinrich,S.L., Atkinson,E.M. III, Lichtsteiner,S.P., Vasserot,A.P.
and Pruzan,R.A.
TITLE          Methods for purifying telomerase
JOURNAL        Patent: US 6545133-A 1 08-APR-2003;
FEATURES       source
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Query Match      6.9%; Score 31; DB 1; Length 31;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGTCTAACCTTAAGGAGGCGGTAGGC 72
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Db 31 TTGTCTAACCTTAAGGAGGCGGTAGGC 1

RESULT 21
AR305067/c
LOCUS          AR305067          31 bp      DNA      linear      PAT 12-JUN-2003
DEFINITION     Sequence 1 from patent US 6545133.
ACCESSION      AR305067
VERSION        AR305067.1 GI:31694374
KEYWORDS       Unknown.
SOURCE         Unknown.
ORGANISM       Unclassified.
REFERENCE      1 (bases 1 to 31)
AUTHORS        Weinrich,S.L., Atkinson,E.M. III, Lichtsteiner,S.P., Vasserot,A.P.
and Pruzan,R.A.
TITLE          Methods for purifying telomerase
JOURNAL        Patent: US 6545133-A 1 08-APR-2003;
FEATURES       source
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Query Match      6.9%; Score 31; DB 1; Length 31;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGTCTAACCTTAAGGAGGCGGTAGGC 72
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Db 31 TTGTCTAACCTTAAGGAGGCGGTAGGC 1

RESULT 22
AR016054/c
LOCUS          AR016054          30 bp      DNA      linear      PAT 05-DEC-1998
DEFINITION     Sequence 22 from patent US 5776679.
ACCESSION      AR016054
VERSION        AR016054.1 GI:3972331
KEYWORDS       Unknown.
SOURCE         Unknown.
ORGANISM       Unclassified.
REFERENCE      1 (bases 1 to 30)
AUTHORS        Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE          Assays for the DNA component of human telomerase
JOURNAL        Patent: US 5776679-A 22 07-JUL-1998;
FEATURES       source
                1. .30
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                /mol_type="unassigned DNA"

Query Match      6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 34;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 77 TGCTTTTGCTCCCGCGCGCTGTTTTC 106
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Db 30 TGCTTTTGCTCCCGCGCGCTGTTTTC 1

RESULT 23
BD071082
LOCUS          BD071082          31 bp      RNA      linear      PAT 27-AUG-2002
DEFINITION     Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION      BD071082
VERSION        BD071082.1 GI:22616685
KEYWORDS       unclassified.
SOURCE         unclassified.
ORGANISM       unclassified.
REFERENCE      1 (bases 1 to 31)
AUTHORS        Shay,J.W., Wright,W.E., Piatyszek,M.A., Corey,D. and Norton,J.C.
TITLE          Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL        Patent: JP 2001517929-A 48 09-OCT-2001;
FEATURES       source
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                /db_xref="taxon:32644"

Query Match      6.9%; Score 31; DB 1; Length 31;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 40 TTTTGTCTAACCTTAAGGAGGCGGTAG 70
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Db 1 TTTTGTCTAACCTTAAGGAGGCGGTAG 31

RESULT 24
AR016054/c
LOCUS          AR016054          30 bp      DNA      linear      PAT 05-DEC-1998
DEFINITION     Sequence 22 from patent US 5776679.
ACCESSION      AR016054
VERSION        AR016054.1 GI:3972331
KEYWORDS       Unknown.
SOURCE         Unknown.
ORGANISM       Unclassified.
REFERENCE      1 (bases 1 to 30)
AUTHORS        Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE          Assays for the DNA component of human telomerase
JOURNAL        Patent: US 5776679-A 22 07-JUL-1998;
FEATURES       source
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Query Match      6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 34;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 77 TGCTTTTGCTCCCGCGCGCTGTTTTC 106
    |||||
Db 30 TGCTTTTGCTCCCGCGCGCTGTTTTC 1

RESULT 25
BD071082
LOCUS          BD071082          31 bp      RNA      linear      PAT 27-AUG-2002
DEFINITION     Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION      BD071082
VERSION        BD071082.1 GI:22616685
KEYWORDS       unclassified.
SOURCE         unclassified.
ORGANISM       unclassified.
REFERENCE      1 (bases 1 to 31)
AUTHORS        Shay,J.W., Wright,W.E., Piatyszek,M.A., Corey,D. and Norton,J.C.
TITLE          Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL        Patent: JP 2001517929-A 48 09-OCT-2001;
FEATURES       source
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Query Match      6.9%; Score 31; DB 1; Length 31;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 40 TTTTGTCTAACCTTAAGGAGGCGGTAG 70
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Db 1 TTTTGTCTAACCTTAAGGAGGCGGTAG 31
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AR059215/c  
LOCUS AR059215 30 bp DNA linear PAT 29-SEP-1999  
DEFINITION Sequence 22 from patent US 5837857.  
ACCESSION AR059215  
VERSION AR059215.1 GI:5984792  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE  
1 (bases 1 to 30)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5837857-A 22 17-NOV-1998;  
LOCATION/Qualifiers  
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Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 34;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 77 TGCCTTTGCTCCCGCGCGCTGTTTTCTC 106  
Db 30 TGCCTTTGCTCCCGCGCGCTGTTTTCTC 1

RESULT 24  
AR063829/c  
LOCUS AR063829 30 bp DNA linear PAT 29-SEP-1999  
DEFINITION Sequence 5 from patent US 5846723.  
ACCESSION AR063829  
VERSION AR063829.1 GI:5993137  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE  
1 (bases 1 to 30)  
AUTHORS Kim,N.Woo., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.  
TITLE Methods for detecting the RNA component of telomerase  
JOURNAL Patent: US 5846723-A 5 08-DEC-1998;  
LOCATION/Qualifiers  
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Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 34;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 290 CTGCCACCGCGAAGATTGGGCTCTGTCTCAG 319  
Db 30 CTGCCACCGCGAAGATTGGGCTCTGTCTCAG 1

RESULT 25  
AR063832/c  
LOCUS AR063832 30 bp DNA linear PAT 29-SEP-1999  
DEFINITION Sequence 8 from patent US 5846723.  
ACCESSION AR063832  
VERSION AR063832.1 GI:5993140  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE  
1 (bases 1 to 30)  
AUTHORS Kim,N.Woo., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.  
TITLE Methods for detecting the RNA component of telomerase  
JOURNAL Patent: US 5846723-A 8 08-DEC-1998;  
LOCATION/Qualifiers  
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Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 34;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 137 CCTGCCGCGCTTCCACCGTTTCATTCTAGAGC 166  
Db 30 CCTGCCGCGCTTCCACCGTTTCATTCTAGAGC 1

RESULT 26  
AR075526/c  
LOCUS AR075526 30 bp DNA linear PAT 30-AUG-2000  
DEFINITION Sequence 23 from patent US 5958680.  
ACCESSION AR075526  
VERSION AR075526.1 GI:10002274  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE  
1 (bases 1 to 30)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5958680-A 23 28-SEP-1999;  
LOCATION/Qualifiers  
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source  
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/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 34;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 77 TGCCTTTGCTCCCGCGCGCTGTTTTCTC 106  
Db 30 TGCCTTTGCTCCCGCGCGCTGTTTTCTC 1

RESULT 27  
AR161924/c  
LOCUS AR161924 30 bp DNA linear PAT 17-OCT-2001  
DEFINITION Sequence 22 from patent US 6258535.  
ACCESSION AR161924  
VERSION AR161924.1 GI:16228952  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE  
1 (bases 1 to 30)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 6258535-A 22 10-JUL-2001;  
LOCATION/Qualifiers  
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/mol\_type="unassigned DNA"

Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 34;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 77 TGCCTTTGCTCCCGCGCGCTGTTTTCTC 106  
Db 30 TGCCTTTGCTCCCGCGCGCTGTTTTCTC 1

RESULT 28  
BD176165/c  
LOCUS BD176165 30 bp DNA linear PAT 18-MAR-2003  
DEFINITION Mammalian telomerase.  
ACCESSION BD176165  
VERSION BD176165.1 GI:29121871  
KEYWORDS JP 2002272489-A/24.

SOURCE unidentified  
ORGANISM unclassified  
REFERENCE 1 (bases 1 to 30)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: JP 2002272489-A 24-SEP-2002;  
GERON CORP  
COMMENT OS Unidentified  
PN JP 2002272489-A/24  
PD 24-SEP-2002  
PF 06-MAR-2002 JP 2002061125  
PR 07-JUL-1994 US 08/272102,27-OCT-1994 US 08/330123 PR  
07-JUN-1995 US 08/472802,07-JUN-1995 US 08/482115 PI BRYANT  
VILLEPONTEAU,JUNI I FENG, WALTER FUNK, WILLIAM H ANDREWS PC  
C12N15/09,C12N9/59,C12Q1/68,G01N33/53,G01N33/566,C12N15/00 CC  
Strandedness: Single;  
CC topology: Linear;  
CC Mammalian telomerase  
FH Key Location/Qualifiers  
FT source 1..30  
FT Location/Qualifiers  
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Best Local Similarity 100.0%; Pred. No. 34;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 77 TGCTTTTCTCCCGCGCGCTGTTTTC 106  
Db 30 TGCTTTTCTCCCGCGCGCTGTTTTC 1  
RESULT 29  
I31769/c  
LOCUS I31769  
DEFINITION Sequence 22 from patent US 5583016.  
ACCESSION I31769  
VERSION I31769.1 GI:1822560  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 30)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5583016-A 22-DEC-1996;  
FEATURES source  
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/mol\_type="genomic DNA"  
Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 34;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 77 TGCTTTTGTCCCGCGCGCTGTTTTC 106  
Db 30 TGCTTTTGTCCCGCGCGCTGTTTTC 1  
RESULT 30  
AR279619/c  
LOCUS AR279619  
DEFINITION Sequence 4 from patent US 6517834.  
ACCESSION AR279619  
VERSION AR279619.1 GI:29714513  
KEYWORDS  
SOURCE Unknown.  
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Best Local Similarity 100.0%; Pred. No. 34;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

ORGANISM Unknown.  
Unclassified.  
REFERENCE 1 (bases 1 to 30)  
AUTHORS Weinrich,S.L., Atkinson,E.M. III, Lichtsteiner,S.P., Vasserot,A.P.  
TITLE Purified telomerase  
JOURNAL Patent: US 6517834-A 4 11-FEB-2003;  
FEATURES source  
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/mol\_type="genomic DNA"  
Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 34;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 167 AACAAAAATGTCAGCTGCTGGCCCGTTC 196  
Db 30 AAACAAAAATGTCAGCTGCTGGCCCGTTC 1  
RESULT 31  
AR279620/c  
LOCUS AR279620  
DEFINITION Sequence 5 from patent US 6517834.  
ACCESSION AR279620  
VERSION AR279620.1 GI:29714514  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 30)  
AUTHORS Weinrich,S.L., Atkinson,E.M. III, Lichtsteiner,S.P., Vasserot,A.P.  
TITLE Purified telomerase  
JOURNAL Patent: US 6517834-A 5 11-FEB-2003;  
FEATURES source  
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/mol\_type="genomic DNA"  
Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 34;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 137 CCTGCGCCTTCCACCGTTCATCTAGAC 166  
Db 30 CCTGCGCCTTCCACCGTTCATCTAGAC 1  
RESULT 32  
AR305070/c  
LOCUS AR305070  
DEFINITION Sequence 4 from patent US 6545133.  
ACCESSION AR305070  
VERSION AR305070.1 GI:31694377  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 30)  
AUTHORS Weinrich,S.L., Atkinson,E.M. III, Lichtsteiner,S.P., Vasserot,A.P.  
TITLE Methods for purifying telomerase  
JOURNAL Patent: US 6545133-A 4 08-APR-2003;  
FEATURES source  
1..30 /organism="unknown"  
/mol\_type="genomic DNA"  
Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 34;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 30 AAACAAAAATGTCAGCTGCTGCGCCGCTC 1

RESULT 33
AR305071/c
LOCUS AR305071 30 bp DNA linear PAT 12-JUN-2003
DEFINITION Sequence 5 from patent US 6545133.
ACCESSION AR305071
VERSION AR305071.1 GI:31694378
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 30)
AUTHORS Weinrich,S.L., Atkinson,E.M. III, Lichteteiner,S.P., Vasserot,A.P.
and Pruzan,R.A.
TITLE Methods for purifying telomerase
JOURNAL Patent: US 6545133-A 5 08-APR-2003;
FEATURES Location/Qualifiers
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Query Match 6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 34;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 137 CTGCGCGCTTCCACCGTTCATTCTAGAGC 166
Db 30 CTGCGCGCTTCCACCGTTCATTCTAGAGC 1

RESULT 34
AR306472/c
LOCUS AR306472 30 bp DNA linear PAT 12-JUN-2003
DEFINITION Sequence 22 from patent US 6548298.
ACCESSION AR306472
VERSION AR306472.1 GI:31696311
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 30)
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE Mammalian telomerase
JOURNAL Patent: US 6548298-A 22 15-APR-2003;
FEATURES Location/Qualifiers
source 1..30
/organism="unknown"
/mol_type="genomic DNA"

Query Match 6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 34;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 77 TGCCTTTGCTCCCGCGCGCTGTTTTCTC 106
Db 30 TGCCTTTGCTCCCGCGCGCTGTTTTCTC 1

RESULT 35
AR373060/c
LOCUS AR373060 30 bp DNA linear PAT 18-DEC-2003
DEFINITION Sequence 2 from patent US 6602669.
ACCESSION AR373060
VERSION AR373060.1 GI:40074991
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 30)
AUTHORS Kim,N.W., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.
TITLE Method for detecting and inhibiting RNA component of telomerase
JOURNAL Patent: JP 2001507229-A 5 05-JUN-2001;
COMMENT PN JP 2001507229-A/5
PD 05-JUN-2001
PF 19-DEC-1997 JP 1998529003
PR 20-DEC-1996 US 08/770564,20-DEC-1996 US 08/770565 PI
NAM WOO KIM,FRED WU,JAMES T KEALEY,RONALD PRUZAN,SCOTT L PI
WEINRICH
PC C12N15/09,A61K9/08,A61K31/7105,A61K45/00,A61K48/00,A61P35/00,
PC C12N5/10,
PC C12N9/12,C12Q1/68,C12Q1/68,C12N15/00,C12N5/00 CC
```

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REFERENCE 1 (bases 1 to 30)
AUTHORS Letsinger,R.L. and Garimella,V.
TITLE Method of detection by enhancement of silver staining
JOURNAL Patent: US 6602669-A 2 05-AUG-2003;
FEATURES Location/Qualifiers
source 1..30
/organism="unknown"
/mol_type="genomic DNA"

Query Match 6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 34;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 137 CTGCGCGCTTCCACCGTTCATTCTAGAGC 166
Db 30 CTGCGCGCTTCCACCGTTCATTCTAGAGC 1

RESULT 36
AX465471/c
LOCUS AX465471 30 bp DNA linear PAT 16-JUL-2002
DEFINITION Sequence 2 from Patent WO0204681.
ACCESSION AX465471
VERSION AX465471.1 GI:21899833
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM synthetic construct
REFERENCE 1
AUTHORS Letsinger,R.L. and Garimella,V.
TITLE Method of detection by enhancement of silver staining
JOURNAL Patent: WO 0204681-A 2 17-JAN-2002;
FEATURES Location/Qualifiers
source 1..30
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/notes="synthetic oligomer"

Query Match 6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 34;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 137 CTGCGCGCTTCCACCGTTCATTCTAGAGC 166
Db 30 CTGCGCGCTTCCACCGTTCATTCTAGAGC 1

RESULT 37
BD023701/c
LOCUS BD023701 30 bp DNA linear PAT 27-AUG-2002
DEFINITION Method for detecting and inhibiting RNA component of telomerase.
ACCESSION BD023701
VERSION BD023701.1 GI:22564924
KEYWORDS JP 2001507229-A/5.
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1 (bases 1 to 30)
AUTHORS Kim,N.W., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.
TITLE Method for detecting and inhibiting RNA component of telomerase
JOURNAL Patent: JP 2001507229-A 5 05-JUN-2001;
COMMENT PN JP 2001507229-A/5
PD 05-JUN-2001
PF 19-DEC-1997 JP 1998529003
PR 20-DEC-1996 US 08/770564,20-DEC-1996 US 08/770565 PI
NAM WOO KIM,FRED WU,JAMES T KEALEY,RONALD PRUZAN,SCOTT L PI
WEINRICH
PC C12N15/09,A61K9/08,A61K31/7105,A61K45/00,A61K48/00,A61P35/00,
PC C12N5/10,
PC C12N9/12,C12Q1/68,C12Q1/68,C12N15/00,C12N5/00 CC
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Strandedness: Single;  
CC Topology: Linear;  
CC /note= 'oligo 16';  
FH Key Location/Qualifiers.

## FEATURES

source  
1..30  
/organism="unidentified"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32644"

Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 34;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 290 CTGCACCGCGAAGAGTTGGCTCTGTGAC 319

Db 30 CTGCACCGCGAAGAGTTGGCTCTGTGAC 1

## RESULT 38

BD023704/c 30 bp DNA linear PAT 27-AUG-2002  
LOCUS Method for detecting and inhibiting RNA component of telomerase.

DEFINITION BD023704

ACCESSION BD023704.1 GI:22564927

VERSION JP 2001507229-A/8.

KEYWORDS unidentified

SOURCE unidentified

ORGANISM unclassified.

REFERENCE 1 (bases 1 to 30)

AUTHORS Kim,N.W., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.

TITLE Method for detecting and inhibiting RNA component of telomerase

JOURNAL Patent: JP 2001507229-A 8 05-JUN-2001;

GERON CORP

PN JP 2001507229-A/8

PD 05-JUN-2001

PF 19-DEC-1997 JP 1998529003

PR 20-DEC-1996 US 08/770564,20-DEC-1996 US 08/770565 PI

NAM WOO KIM,FRED WU,JAMES T KEALEY,RONALD PRUZAN,SCOTT L PI

WEINRICH

PC C12N15/09,A61K9/08,A61K31/7105,A61K45/00,A61K48/00,A61P35/00,

PC C12N5/10,

PC C12N9/12,C12Q1/68,C12Q1/68,C12N15/00,C12N5/00 CC

Strandedness: Single;

CC Topology: Linear;

CC /note= 'oligo 21';

FH Key Location/Qualifiers.

## FEATURES

source  
1..30  
/organism="unidentified"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32644"

Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 34;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 137 CTGCGCGCTTCCACCGTTTCATTCTAGAC 166

Db 30 CTGCGCGCTTCCACCGTTTCATTCTAGAC 1

## RESULT 39

A84595/c 30 bp DNA linear PAT 21-JAN-2000  
LOCUS Sequence 5 from Patent WO9845450.

DEFINITION A84595

ACCESSION A84595.1 GI:6733511

VERSION unidentified

KEYWORDS unidentified

SOURCE unidentified

ORGANISM unclassified.

REFERENCE 1 (bases 1 to 30)

AUTHORS Atkinson,E.M. and Kealey,J.T.  
TITLE PURIFIED TELOMERASE  
JOURNAL Patent: WO 9845450-A 5 15-OCT-1998;  
GERON CORP (US)

## FEATURES

source  
1..30  
Location/Qualifiers  
/organism="unidentified"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32644"  
modified\_base 1  
/note="N = BIOTINYLATED G"  
/mod\_base=OTHER

Query Match 6.4%; Score 29; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 40;  
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 167 AACAAAAAATGTCAGCTGTCGCCCGTT 195

Db 30 AACAAAAAATGTCAGCTGTCGCCCGTT 2

## RESULT 40

A84596/c 30 bp DNA linear PAT 21-JAN-2000  
LOCUS Sequence 6 from Patent WO9845450.  
DEFINITION A84596

ACCESSION A84596.1 GI:6733512

VERSION unidentified

KEYWORDS unclassified.

SOURCE unclassified.

ORGANISM unclassified.

REFERENCE 1 (bases 1 to 30)

AUTHORS Atkinson,E.M. and Kealey,J.T.

TITLE PURIFIED TELOMERASE

JOURNAL Patent: WO 9845450-A 6 15-OCT-1998;

GERON CORP (US)

## FEATURES

source  
1..30  
Location/Qualifiers  
/organism="unidentified"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32644"  
modified\_base 1  
/note="N = BIOTINYLATED G"  
/mod\_base=OTHER

Query Match 6.4%; Score 29; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 40;  
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 137 CTGCGCGCTTCCACCGTTTCATTCTAGAG 165

Db 30 CTGCGCGCTTCCACCGTTTCATTCTAGAG 2

## RESULT 41

AR079889/c 30 bp DNA linear PAT 31-AUG-2000  
LOCUS Sequence 2 from patent US 5968506.  
DEFINITION AR079889

ACCESSION AR079889.1 GI:10006642

VERSION Unknown.

KEYWORDS Unknown.

SOURCE Unclassified.

ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 30)

AUTHORS Weinrich,S.L., Atkinson,E.M. III, Lichtsteiner,S.P., Vasserot,A.P.,

Pruzan,R.A. and Kealey,J.T.

TITLE Purified telomerase

JOURNAL Patent: US 5968506-A 2 19-OCT-1999;

## FEATURES

source  
1..30  
Location/Qualifiers  
/organism="unknown"

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/mol_type="unassigned DNA"

Query Match      6.4%; Score 29; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 43 TGTCTAACCTTAAGTGAAGGGCGTAGG 71
      |||
Db 30 TGTCTAACCTTAAGTGAAGGGCGTAGG 2

RESULT 42
AR079892/c      AR079892      30 bp      DNA      linear      PAT 31-AUG-2000
LOCUS
DEFINITION      Sequence 5 from patent US 5968506.
ACCESSION      AR079892
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
1 (bases 1 to 30)
AUTHORS      Weinrich,S.L., Atkinson,E.M. III, Lichtsteiner,S.P., Vasserot,A.P.,
Pruzan,R.A. and Kealey,J.T.
TITLE
JOURNAL
JOURNAL
Patent: US 5968506-A 5 19-OCT-1999;
Location/Qualifiers
FEATURES
source
1..30
/organism="unknown"
/mol_type="unassigned DNA"

Query Match      6.4%; Score 29; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 167 AAACAAAAATGTCAGCTGCTGGCCCGTT 195
      |||
Db 30 AAACAAAAATGTCAGCTGCTGGCCCGTT 2

RESULT 43
AR079893/c      AR079893      30 bp      DNA      linear      PAT 31-AUG-2000
LOCUS
DEFINITION      Sequence 6 from patent US 5968506.
ACCESSION      AR079893
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
1 (bases 1 to 30)
AUTHORS      Weinrich,S.L., Atkinson,E.M. III, Lichtsteiner,S.P., Vasserot,A.P.,
Pruzan,R.A. and Kealey,J.T.
TITLE
JOURNAL
JOURNAL
Patent: US 5968506-A 6 19-OCT-1999;
Location/Qualifiers
FEATURES
source
1..30
/organism="unknown"
/mol_type="unassigned DNA"

Query Match      6.4%; Score 29; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 137 CCTGCCGCTTCCACCGTTTCATTCTAGAG 165
      |||
Db 30 CCTGCCGCTTCCACCGTTTCATTCTAGAG 2

RESULT 44
BD058136/c      BD058136      30 bp      DNA      linear      PAT 27-AUG-2002
LOCUS
DEFINITION      Purified telomerase.

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ACCESSION      BD058136
VERSION      BD058136.1 GI:22603742
KEYWORDS
SOURCE
ORGANISM      Zea mays
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
clade; Panicoideae; Andropogoneae; Zea.
1 (bases 1 to 30)
AUTHORS      Weinrich,S.L., Iii,E.M.A., Lichtsteiner,S.P., Vasserot,A.P.,
Pruzan,R.A. and Kealey,J.T.
TITLE
JOURNAL
JOURNAL
Patent: JP 2001509681-A 5 24-JUL-2001;
GERON CORP
PN JP 2001509681-A/5
PD 24-JUL-2001
PF 04-APR-1997 JP 1998542718
PI SCOTT L WEINRICH, EDWARD M ATKINSON III SERGE P LICHTSTEINER,
PI ALAIN P VASSEROT, RONALD A PRUZAN, JAMES T KEALEY PC
C12N15/54, C12N9/12, C07K16/40, C12Q1/68, C07K14/47 CC
Strandedness:
Single;
CC Topology: Linear;
CC /mod base= OTHER
CC /note= 'N = biotinylated G'
CC /note= 'oligonucleotide 13'
FH Key Location/Qualifiers
FT modified base 1.
source
1..30
/organism="Zea mays"
/mol_type="genomic DNA"
/db_xref="taxon:4577"

Query Match      6.4%; Score 29; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 167 AAACAAAAATGTCAGCTGCTGGCCCGTT 195
      |||
Db 30 AAACAAAAATGTCAGCTGCTGGCCCGTT 2

RESULT 45
BD058137/c      BD058137      30 bp      DNA      linear      PAT 27-AUG-2002
LOCUS
DEFINITION      Purified telomerase.
ACCESSION      BD058137
VERSION      BD058137.1 GI:22603743
KEYWORDS
SOURCE
ORGANISM      Zea mays
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
clade; Panicoideae; Andropogoneae; Zea.
1 (bases 1 to 30)
AUTHORS      Weinrich,S.L., Iii,E.M.A., Lichtsteiner,S.P., Vasserot,A.P.,
Pruzan,R.A. and Kealey,J.T.
TITLE
JOURNAL
JOURNAL
Patent: JP 2001509681-A 6 24-JUL-2001;
GERON CORP
PN JP 2001509681-A/6
PD 24-JUL-2001
PF 04-APR-1997 JP 1998542718
PI SCOTT L WEINRICH, EDWARD M ATKINSON III SERGE P LICHTSTEINER,
PI ALAIN P VASSEROT, RONALD A PRUZAN, JAMES T KEALEY PC
C12N15/54, C12N9/12, C07K16/40, C12Q1/68, C07K14/47 CC
Strandedness:
Single;
CC Topology: Linear;
CC /mod base= OTHER
CC /note= 'N = biotinylated G'
CC /note= 'oligonucleotide 14'
FH Key Location/Qualifiers
FT modified base 1.

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/organism="unknown"
/mol_type="genomic DNA"

Query Match      6.3%; Score 28.4; DB 1; Length 30;
Best Local Similarity 96.7%; Pred. No. 45;
Matches 29; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 412 GAGCTGTGGGACGTGCACCCAGGACTCGG 441
      |||||
Db 30 GAGCTATGGGACGTGCACCCAGGACTCGG 1

RESULT 50
AR370168
LOCUS      AR370168
DEFINITION Sequence 3 from patent US 6300131.
ACCESSION  AR370168
VERSION     AR370168.1 GI:34606663
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unclassified.
REFERENCE  1 (bases 1 to 28)
AUTHORS   Greider,C.W. and Le,S.
TITLE     Telomerase-associated proteins
JOURNAL   Patent: US 6300131-A 3 09-OCT-2001;
          Location/Qualifiers
FEATURES   source
            1..28
            /organism="unknown"
            /mol_type="genomic DNA"

Query Match      6.2%; Score 28; DB 1; Length 28;
Best Local Similarity 100.0%; Pred. No. 44;
Matches 28; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 17 GCCTGGGAGGGTGGTGGCCATTTTTC 44
      |||||
Db 1 GCCTGGGAGGGTGGTGGCCATTTTTC 28

RESULT 51
AR4594/c
LOCUS      AR4594
DEFINITION Sequence 4 from Patent WO9845450.
ACCESSION  AR4594
VERSION     AR4594.1 GI:6733510
KEYWORDS   .
SOURCE     unidentified
ORGANISM   unclassified.
REFERENCE  1 (bases 1 to 30)
AUTHORS   Atkinson,E.M. and Kealey,J.T.
TITLE     PURIFIED TELOMERASE
JOURNAL   Patent: WO 9845450-A 4 15-OCT-1998;
          GERON CORP (US)
FEATURES   Location/Qualifiers
            1..30
            /organism="unidentified"
            /mol_type="unassigned DNA"
            /db_xref="taxon:32644"
            modified_base 1
            /note="N = BIOTINYLATED G"
            /mod_base=OTHER

Query Match      6.1%; Score 27.4; DB 1; Length 30;
Best Local Similarity 96.6%; Pred. No. 52;
Matches 28; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 412 GAGCTGTGGGACGTGCACCCAGGACTCGG 440
      |||||
Db 30 GAGCTATGGGACGTGCACCCAGGACTCGG 2

/organism="unknown"
/mol_type="genomic DNA"

Query Match      6.3%; Score 28.4; DB 1; Length 30;
Best Local Similarity 96.7%; Pred. No. 45;
Matches 29; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 412 GAGCTGTGGGACGTGCACCCAGGACTCGG 441
      |||||
Db 30 GAGCTATGGGACGTGCACCCAGGACTCGG 1

RESULT 52
AR079891/c
LOCUS      AR079891
DEFINITION Sequence 4 from patent US 5968506.
ACCESSION  AR079891
VERSION     AR079891.1 GI:10006644
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unclassified.
REFERENCE  1 (bases 1 to 30)
AUTHORS   Weinrich,S.L., Atkinson,E.M. III, Lichtsteiner,S.P., Vasserot,A.P.,
          Pruzan,R.A. and Kealey,J.T.
TITLE     Purified telomerase
JOURNAL   Patent: US 5968506-A 4 19-OCT-1999;
          Location/Qualifiers
FEATURES   source
            1..30
            /organism="unknown"
            /mol_type="unassigned DNA"

Query Match      6.1%; Score 27.4; DB 1; Length 30;
Best Local Similarity 96.6%; Pred. No. 52;
Matches 28; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 412 GAGCTGTGGGACGTGCACCCAGGACTCGG 440
      |||||
Db 30 GAGCTATGGGACGTGCACCCAGGACTCGG 2

RESULT 53
BD058135/c
LOCUS      BD058135
DEFINITION Purified telomerase.
ACCESSION  BD058135
VERSION     BD058135.1 GI:22603741
KEYWORDS   JP 2001509681-A/4.
SOURCE     Zea mays
ORGANISM   Zea mays
REFERENCE  1 (bases 1 to 30)
AUTHORS   Weinrich,S.L., Iii,E.M.A., Lichtsteiner,S.P., Vasserot,A.P.,
          Pruzan,R.A. and Kealey,J.T.
TITLE     Purified telomerase
JOURNAL   Patent: JP 2001509681-A 4 24-JUL-2001;
          GERON CORP
COMMENT    PN JP 2001509681-A/4
          PD 24-JUL-2001
          PF 04-APR-1997 JP 1998542718
          PI SCOTT L WEINRICH, EDWARD M ATKINSON III, SERGE P LICHTSTEINER,
          PI ALAIN P VASSEROT, RONALD A PRUZAN, JAMES T KEALEY PC
          C12N15/54, C12N9/12, C07K16/40, C12Q1/68, C07K14/47 CC
          Single;
          CC Topology: Linear;
          CC /mod_base= OTHER
          CC /note= 'N = biotinylated G'
          CC /note= 'oligonucleotide 5'
          FH Key Location/Qualifiers
          FT modified_base 1
          Location/Qualifiers
            1..30
            /organism="Zea mays"
            /mol_type="genomic DNA"
            /db_xref="taxon:4577"

Query Match      6.1%; Score 27.4; DB 1; Length 30;
Best Local Similarity 96.6%; Pred. No. 52;
Matches 28; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 412 GAGCTGTGGGACGTGCACCCAGGACTCGG 440
      |||||
Db 30 GAGCTATGGGACGTGCACCCAGGACTCGG 2
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RESULT 54  
AX317989/c  
LOCUS AX317989 27 bp DNA linear PAT 29-SEP-1999  
DEFINITION Sequence 26 from patent US 5846723.  
ACCESSION AR063850  
VERSION AR063850.1 GI:5993158  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 27)  
AUTHORS Kim,N.Woo., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.  
TITLE Methods for detecting the RNA component of telomerase  
JOURNAL Patent: US 5846723-A 26 08-DEC-1998;  
FEATURES  
source  
1..27  
/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 6.0%; Score 27; DB 1; Length 27;  
Best Local Similarity 100.0%; Pred. No. 50;  
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 144 CCTTCCACCGTTCATTCTAGAGCAAC 170  
|||||  
Db 27 CCTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 55  
AX317989/c  
LOCUS AX317989 27 bp DNA linear PAT 14-DEC-2001  
DEFINITION Sequence 2 from Patent WO0190409.  
ACCESSION AX317989  
VERSION AX317989.1 GI:17900798  
KEYWORDS  
SOURCE synthetic construct  
ORGANISM synthetic construct  
other sequences; artificial sequences.  
REFERENCE 1  
AUTHORS Chen,X.Q. and Anker,P.  
TITLE Cancer diagnosis method  
JOURNAL Patent: WO 0190409-A 2 29-NOV-2001;  
Chen, Xu Qi (US); Stroun, Maurice (CH); Anker, Philippe (CH)  
FEATURES  
source  
1..27  
/organism="synthetic construct"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32630"

Query Match 6.0%; Score 27; DB 1; Length 27;  
Best Local Similarity 100.0%; Pred. No. 50;  
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 144 CCTTCCACCGTTCATTCTAGAGCAAC 170  
|||||  
Db 27 CCTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 56  
BD023722/c  
LOCUS BD023722 27 bp DNA linear PAT 27-AUG-2002  
DEFINITION Method for detecting and inhibiting RNA component of telomerase.  
ACCESSION BD023722  
VERSION BD023722.1 GI:22564945  
KEYWORDS JP 2001507229-A/26.  
SOURCE unidentified  
ORGANISM unidentified  
unclassified.  
REFERENCE 1 (bases 1 to 27)  
AUTHORS Kim,N.W., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.  
TITLE Method for detecting and inhibiting RNA component of telomerase

JOURNAL Patent: JP 2001507229-A 26 05-JUN-2001;  
GERON CORP  
PN JP 2001507229-A/26  
PD 05-JUN-2001  
PF 19-DEC-1997 JP 1998529003  
PR 20-DEC-1996 US 08/770564,20-DEC-1996 US 08/770565 PI  
NAM WOO KIM, FRED WU, JAMES T KEALEY, RONALD PRUZAN, SCOTT L PI  
WEINRICH  
PC C12N15/09,A61K9/08,A61K31/7105,A61K45/00,A61K48/00,A61P35/00,  
PC C12N5/10,  
PC C12N9/12,C12Q1/68,C12Q1/68,C12N15/00,C12N5/00 CC  
Strandedness: Single;  
CC Topology: Linear;  
CC /note='hTR reverse primer'  
FH Key Location/Qualifiers  
1..27 Location/Qualifiers  
/organism="unidentified"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32644"

Query Match 6.0%; Score 27; DB 1; Length 27;  
Best Local Similarity 100.0%; Pred. No. 50;  
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 144 CCTTCCACCGTTCATTCTAGAGCAAC 170  
|||||  
Db 27 CCTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 57  
BD225801/c  
LOCUS BD225801 30 bp DNA linear PAT 17-JUL-2003  
DEFINITION Promoter region of mouse and human telomerase RNA component genes.  
ACCESSION BD225801  
VERSION BD225801.1 GI:33035571  
KEYWORDS JP 2002509699-A/4.  
SOURCE synthetic construct  
ORGANISM synthetic construct  
other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 30)  
AUTHORS Keith,W.N.  
TITLE Promoter region of mouse and human telomerase RNA component genes  
JOURNAL Patent: JP 2002509699-A 4 02-APR-2002;  
CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD  
OS Artificial Sequence  
PN JP 2002509699-A/4  
PD 02-APR-2002  
PF 29-JAN-1999 JP 2000529424  
PR 29-JAN-1998 GB 9801902.9  
PI WILLIAM NICOL KEITH  
PC C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00, PC  
A61K48/00,  
PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC  
,C12Q1/68/C12N9/12,  
PC (A61K35/76,A61K31:522),C12N15/00,A61K37/02,C12N5/00 CC  
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/db\_xref="taxon:32630"

Query Match 5.9%; Score 26.8; DB 1; Length 30;  
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Qy 46 CTAACCTCACTGAGAGGGGTAGCGCC 75  
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Db 30 CTAACCCCTAACTGAGAGGGCGTAGGATCC 1

RESULT 58  
AX019550/c  
LOCUS AX019550 30 bp DNA linear PAT 07-SEP-2000  
DEFINITION Sequence 4 from Patent WO938964.  
ACCESSION AX019550  
VERSION AX019550.1 GI:10043464  
KEYWORDS  
SOURCE synthetic construct  
ORGANISM synthetic construct  
other sequences; artificial sequences.

REFERENCE 1  
AUTHORS Keith,W.N.  
TITLE Promoter regions of the mouse and human telomerase rna component  
genes  
JOURNAL Patent: WO 938964-A 4 05-AUG-1999;  
KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)  
FEATURES  
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1. .30  
/organism="synthetic construct"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32630"  
/note="primer"

Query Match 5.9%; Score 26.8; DB 1; Length 30;  
Best Local Similarity 93.3%; Pred. No. 58;  
Matches 28; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGGCGTAGGCC 75  
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Db 30 CTAACCCCTAACTGAGAGGGCGTAGGATCC 1

RESULT 59  
AR016063  
LOCUS AR016063 28 bp DNA linear PAT 05-DEC-1998  
DEFINITION Sequence 31 from patent US 5776679.  
ACCESSION AR016063  
VERSION AR016063.1 GI:3972340  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
Unclassified.

REFERENCE 1 (bases 1 to 28)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Assays for the DNA component of human telomerase  
JOURNAL Patent: US 5776679-A 31 07-JUL-1998;  
FEATURES  
source  
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/organism="unknown"  
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Query Match 5.9%; Score 26.4; DB 1; Length 28;  
Best Local Similarity 96.4%; Pred. No. 57;  
Matches 27; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 17 GCCTGGGAGGGTGGTGGCCATTTTGG 44  
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Db 1 GCCTGGGAGGGTGGTGGCTATTTTGG 28

RESULT 60  
AR016072  
LOCUS AR016072 28 bp DNA linear PAT 05-DEC-1998  
DEFINITION Sequence 40 from patent US 5776679.  
ACCESSION AR016072  
VERSION AR016072.1 GI:3972349  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
Unclassified.

REFERENCE 1 (bases 1 to 28)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Assays for the DNA component of human telomerase  
JOURNAL Patent: US 5776679-A 40 07-JUL-1998;  
FEATURES  
source  
1. .28  
/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 5.9%; Score 26.4; DB 1; Length 28;  
Best Local Similarity 96.4%; Pred. No. 57;  
Matches 27; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 17 GCCTGGGAGGGTGGTGGCCATTTTGG 44  
|||||  
Db 1 GCCTGGGAGGGTGGTGGCTATTTTGG 28

REFERENCE 1 (bases 1 to 28)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Assays for the DNA component of human telomerase  
JOURNAL Patent: US 5776679-A 40 07-JUL-1998;  
FEATURES  
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Query Match 5.9%; Score 26.4; DB 1; Length 28;  
Best Local Similarity 96.4%; Pred. No. 57;  
Matches 27; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 17 GCCTGGGAGGGTGGTGGCCATTTTGG 44  
|||||  
Db 1 GCCTGGGAGGGTGGTGGCTATTTTGG 28

RESULT 61  
AR075541  
LOCUS AR075541 28 bp DNA linear PAT 30-AUG-2000  
DEFINITION Sequence 38 from patent US 5958680.  
ACCESSION AR075541  
VERSION AR075541.1 GI:10002287  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
Unclassified.

REFERENCE 1 (bases 1 to 28)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5958680-A 38 28-SEP-1999;  
FEATURES  
source  
1. .28  
/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 5.9%; Score 26.4; DB 1; Length 28;  
Best Local Similarity 96.4%; Pred. No. 57;  
Matches 27; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 17 GCCTGGGAGGGTGGTGGCCATTTTGG 44  
|||||  
Db 1 GCCTGGGAGGGTGGTGGCTATTTTGG 28

RESULT 62  
BD176174  
LOCUS BD176174 28 bp DNA linear PAT 18-MAR-2003  
DEFINITION Mammalian telomerase.  
ACCESSION BD176174  
VERSION BD176174.1 GI:29121880  
KEYWORDS JP 2002272489-A/33.  
SOURCE unidentified  
ORGANISM unidentified  
unclassified.

REFERENCE 1 (bases 1 to 28)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: JP 2002272489-A 33 24-SEP-2002;  
COMMENT  
OS Unidentified  
PD JP 2002272489-A/33  
PF 06-MAR-2002 JP 2002061125  
PR 07-JUL-1994 US 08/272102,27-OCT-1994 US 08/330123 PR  
07-JUN-1995 US 08/472802,07-JUN-1995 US 08/482115 PI BRYANT  
VILLEPONTEAU, JUNLI FENG, WALTER FUNK, WILLIAM H ANDREWS PC  
C12N15/09, C12N9/99, C12Q1/68, G01N33/53, G01N33/566, C12N15/00 CC  
Strandedness: Single;  
CC Topology: Linear;  
CC Mammalian telomerase  
FH Key Location/Qualifiers

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Query Match 5.8%; Score 26.4; DB 1; Length 28;
Best Local Similarity 96.4%; Pred. No. 57;
Matches 27; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 17 GCCTGGAGGGGTGGTGGCCATTTTGG 44
Db 1 GCCTGGAGGGGTGGTGGCTATTTTGG 28

RESULT 63
LOCUS A94987 26 bp DNA linear PAT 26-JAN-2000
DEFINITION Sequence 1 from Patent EP0926245.
ACCESSION A94987
VERSION A94987.1 GI:6779167
KEYWORDS
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1 (bases 1 to 26)
AUTHORS Emrich,T.D.
TITLE Method for detection of carcinoma of the urinary bladder within a
JOURNAL urine sample
PATENT: EP 0926245-A 1 30-JUN-1999;
ROCHE DIAGNOSTICS GMBH (DE)
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Query Match 5.8%; Score 26; DB 1; Length 26;
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Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 54 AACTGAGAAGGGCGTAGCGCGCGTGC 79
Db 1 AACTGAGAAGGGCGTAGCGCGCGTGC 26

RESULT 64
LOCUS A94988 26 bp DNA linear PAT 26-JAN-2000
DEFINITION Sequence 2 from Patent EP0926245.
ACCESSION A94988
VERSION A94988.1 GI:6779168
KEYWORDS
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1 (bases 1 to 26)
AUTHORS Emrich,T.D.
TITLE Method for detection of carcinoma of the urinary bladder within a
JOURNAL urine sample
PATENT: EP 0926245-A 2 30-JUN-1999;
ROCHE DIAGNOSTICS GMBH (DE)
FEATURES
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    /mol_type="unassigned DNA"
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Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 56;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Qy 145 CTTCCACCGTTCATTTCTAGAGCAAC 170
Db 26 CTTCCACCGTTCATTTCTAGAGCAAC 1

RESULT 65
LOCUS AR016055/c 26 bp DNA linear PAT 05-DEC-1998
DEFINITION Sequence 23 from patent US 5776679.
ACCESSION AR016055
VERSION AR016055.1 GI:3972332
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 26)
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE Assays for the DNA component of human telomerase
JOURNAL Patent: US 5776679-A 23 07-JUL-1998;
FEATURES
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Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 56;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATTTCTAGAGCAAC 170
Db 26 CTTCCACCGTTCATTTCTAGAGCAAC 1

RESULT 66
LOCUS AR016061 26 bp DNA linear PAT 05-DEC-1998
DEFINITION Sequence 29 from patent US 5776679.
ACCESSION AR016061
VERSION AR016061.1 GI:3972338
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 26)
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE Assays for the DNA component of human telomerase
JOURNAL Patent: US 5776679-A 29 07-JUL-1998;
FEATURES
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    /organism="unknown"
    /mol_type="unassigned DNA"

Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 56;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 45 TCTAACCCCTAACTGAGAGGGCGTAG 70
Db 1 TCTAACCCCTAACTGAGAGGGCGTAG 26

RESULT 67
LOCUS AR028785 26 bp DNA linear PAT 29-SEP-1999
DEFINITION Sequence 25 from patent US 5858777.
ACCESSION AR028785
VERSION AR028785.1 GI:5940758
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 26)
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AUTHORS Villeponteau,B., Feng,J., Andrews,W.H. and Adams,R.R.  
TITLE Methods and reagents for regulating telomere length and telomerase activity  
JOURNAL Patent: US 5858777-A 25 12-JAN-1999;  
FEATURES Location/Qualifiers

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/mol\_type="unassigned DNA"

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 56;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 45 TCTAACCTTAAGGAGGCGGTAG 70  
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Db 1 TCTAACCTTAAGGAGGCGGTAG 26  
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RESULT 69  
AR028786/c

LOCUS AR028786 26 bp DNA linear PAT 29-SEP-1999  
DEFINITION Sequence 26 from patent US 5858777.  
ACCESSION AR028786  
VERSION AR028786.1 GI:5940759  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 26)

AUTHORS Villeponteau,B., Feng,J., Andrews,W.H. and Adams,R.R.  
TITLE Methods and reagents for regulating telomere length and telomerase activity  
JOURNAL Patent: US 5858777-A 26 12-JAN-1999;  
FEATURES Location/Qualifiers

source

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/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 56;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATTCTAGAGCAAC 170  
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Db 26 CTTCCACCGTTCATTCTAGAGCAAC 1  
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RESULT 69  
AR059216/c

LOCUS AR059216 26 bp DNA linear PAT 29-SEP-1999  
DEFINITION Sequence 23 from patent US 5837857.  
ACCESSION AR059216  
VERSION AR059216.1 GI:5984793  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 26)

AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5837857-A 23 17-NOV-1998;  
FEATURES Location/Qualifiers

source

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Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 56;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATTCTAGAGCAAC 170  
|||||  
Db 26 CTTCCACCGTTCATTCTAGAGCAAC 1  
|||||

RESULT 70  
AR063849

LOCUS AR063849 26 bp DNA linear PAT 29-SEP-1999  
DEFINITION Sequence 25 from patent US 5846723.  
ACCESSION AR063849  
VERSION AR063849.1 GI:5993157  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 26)

AUTHORS Kim,N.Woo., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.  
TITLE Methods for detecting the RNA component of telomerase  
JOURNAL Patent: US 5846723-A 25 08-DEC-1998;  
FEATURES Location/Qualifiers

source

1..26  
/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 56;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 60 GAAGGGCGTAGGCGCGTCTTTGC 85  
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Db 1 GAAGGGCGTAGGCGCGTCTTTGC 26  
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RESULT 71  
AR075527/c

LOCUS AR075527 26 bp DNA linear PAT 30-AUG-2000  
DEFINITION Sequence 24 from patent US 5958680.  
ACCESSION AR075527  
VERSION AR075527.1 GI:10002275  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 26)

AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5958680-A 24 28-SEP-1999;  
FEATURES Location/Qualifiers

source

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/organism="unknown"  
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Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 56;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATTCTAGAGCAAC 170  
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Db 26 CTTCCACCGTTCATTCTAGAGCAAC 1  
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RESULT 72  
AR075533

LOCUS AR075533 26 bp DNA linear PAT 30-AUG-2000  
DEFINITION Sequence 30 from patent US 5958680.  
ACCESSION AR075533  
VERSION AR075533.1 GI:10002281  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 26)

AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5958680-A 30 28-SEP-1999;  
FEATURES Location/Qualifiers

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RESULT 73							
AR161925/c							
LOCUS		AR161925	26 bp	DNA	linear PAT 17-OCT-2001		
DEFINITION		Sequence 23 from patent US 6258535.					
ACCESSION		AR161925					
VERSION		AR161925.1 GI:16228953					
KEYWORDS							
SOURCE		Unknown.					
ORGANISM		Unclassified.					
REFERENCE		1 (bases 1 to 26)					
AUTHORS		Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.					
TITLE		Mammalian telomerase					
JOURNAL		Patent: US 6258535-A 23 10-JUL-2001;					
FEATURES		Location/Qualifiers					
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Query Match		5.8%; Score 26; DB 1; Length 26;					
Best Local Similarity		100.0%; Pred. No. 56;					
Matches		26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;					
QY	145	CTTCCACCGTTCATTCTAGAGCAAAC 170 					
	Db	26 CTTCCACCGTTCATTCTAGAGCAAAC 1					
RESULT 74							
BD176166/c							
LOCUS		BD176166	26 bp	DNA	linear PAT 18-MAR-2003		
DEFINITION		Mammalian telomerase.					
ACCESSION		BD176166					
VERSION		BD176166.1 GI:29121872					
KEYWORDS		JP 2002272489-A/25.					
SOURCE		unidentified					
ORGANISM		unclassified.					
REFERENCE		1 (bases 1 to 26)					
AUTHORS		Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.					
TITLE		Mammalian telomerase					
JOURNAL		Patent: JP 2002272489-A 25 24-SEP-2002;					
COMMENT		GERON CORP					
FEATURES		Location/Qualifiers					
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Matches		26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;					
QY	45	TCTAACCCCTAACTGAGAGGCGGTAG 70 					
	Db	1 TCTAACCCCTAACTGAGAGGCGGTAG 26					
RESULT 75							
BD176171							
LOCUS		BD176171	26 bp	DNA	linear PAT 18-MAR-2003		
DEFINITION		Mammalian telomerase.					
ACCESSION		BD176171					
VERSION		BD176171.1 GI:29121877					
KEYWORDS		JP 2002272489-A/30.					
SOURCE		unidentified					
ORGANISM		unclassified.					
REFERENCE		1 (bases 1 to 26)					
AUTHORS		Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.					
TITLE		Mammalian telomerase					
JOURNAL		Patent: JP 2002272489-A 30 24-SEP-2002;					
COMMENT		GERON CORP					
FEATURES		Location/Qualifiers					
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Query Match		5.8%; Score 26; DB 1; Length 26;					
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Matches		26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;					
QY	45	TCTAACCCCTAACTGAGAGGCGGTAG 70 					
	Db	1 TCTAACCCCTAACTGAGAGGCGGTAG 26					
RESULT 76							
E36507							
LOCUS		E36507	26 bp	DNA	linear PAT 18-JUN-2001		
DEFINITION		Method for detecting bladder cancer in urine samples.					
ACCESSION		E36507					
VERSION		E36507.1 GI:13022704					
KEYWORDS		JP 1999243995-A/1.					
SOURCE		synthetic construct					
ORGANISM		other sequences; artificial sequences.					
REFERENCE		1 (bases 1 to 26)					
AUTHORS		Thomas,E.					
TITLE		Method for detecting bladder cancer in urine samples					
JOURNAL		Patent: JP 1999243995-A 1 14-SEP-1999;					
COMMENT		ROCHE DIAGNOSTICS GMBH					
FEATURES		Location/Qualifiers					
source		1. .26 /organism="unidentified"					
Query Match		5.8%; Score 26; DB 1; Length 26;					
Best Local Similarity		100.0%; Pred. No. 56;					
Matches		26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;					
QY	45	TCTAACCCCTAACTGAGAGGCGGTAG 70 					
	Db	1 TCTAACCCCTAACTGAGAGGCGGTAG 26					
FEATURES		Location/Qualifiers					
source		1. .26 /organism="unidentified"					

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PD 14-SEP-1999
PF 22-DEC-1998 JP 1998365689
PR 22-DEC-1997 DE 19757300:2
PI THOMAS ENRIHI
PC C12Q1/68//C12N1/00
CC
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   /organism="synthetic construct"
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Best Local Similarity 5.8%; Score 26; DB 1; Length 26;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 54 AACTGAGAGGGCGTAGGCGCGTGC 79
Db 1 AACTGAGAGGGCGTAGGCGCGTGC 26

RESULT 77
E36508/c
LOCUS
DEFINITION Method for detecting bladder cancer in urine samples. PAT 18-JUN-2001
ACCESSION E36508
VERSION E36508.1 GI:13022705
KEYWORDS JP 1999243995-A/2.
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 26)
AUTHORS Thomas, E.
TITLE Method for detecting bladder cancer in urine samples
JOURNAL Patent: JP 1999243995-A 2 14-SEP-1999;
COMMENT OS Artificial Sequence
PN JP 1999243995-A/2
PD 14-SEP-1999
PF 22-DEC-1998 JP 1998365689
PR 22-DEC-1997 DE 19757300:2
PI THOMAS ENRIHI
PC C12Q1/68//C12N1/00
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FH Key Location/Qualifiers
FT source 1..26
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Query Match
Best Local Similarity 5.8%; Score 26; DB 1; Length 26;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATTCTAGAGCAAC 170
Db 26 CTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 78
E37045
LOCUS
DEFINITION Human telomerase catalytic subunit promoter. PAT 18-JUN-2001
ACCESSION E37045
VERSION E37045.1 GI:13023008
KEYWORDS JP 1999253177-A/253.
SOURCE unidentified

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ORGANISM unidentified
REFERENCE 1 (bases 1 to 26)
AUTHORS Thomas, R.S., Jochimu, R., Toru, N., Karen, B.C., Greg, B.M.,
        Calvin, B.H. and William, H.A.
TITLE Human telomerase catalytic subunit promoter
JOURNAL Patent: JP 1999253177-A 253 21-SEP-1999;
COMMENT JERON CORP, UNIVERSITY TECHNOLOGY CORP
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        PN JP 1999253177-A/253
        PD 21-SEP-1999
        PF 15-OCT-1998 JP 1998320169
        PR 01-OCT-1996 US 08/724,643, 18-APR-1997 US 08/844,419, PR
        25-APR-1997 US 08/846,017, 06-MAY-1997 US 08/851,843, PR
        09-MAY-1997 US 08/854,050, 14-AUG-1997 US 08/911,312, PR
        14-AUG-1997 US 08/912,951, 14-AUG-1997 US 08/915,503 PI THOMAS
        R SECHI, JOCHIMU RINGNER, TORU NAKAMURA, KAREN B CHAPMAN, PI GREG B
        MORIN.
        PI CALVIN B HAREI, WILLIAM H ANDREWS
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        PC C12Q1/02,
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        PC C12N1/19, C12N1/21, C12N5/10, C12N9/12, C12P21/08, (C12N1/19, PC
        C12R1:84),
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Qy 45 TCTAACCCCTAACTGAGAGGGCGTAG 70
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RESULT 79
E37046/c
LOCUS
DEFINITION Human telomerase catalytic subunit promoter. PAT 18-JUN-2001
ACCESSION E37046
VERSION E37046.1 GI:13023009
KEYWORDS JP 1999253177-A/254.
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1 (bases 1 to 26)
AUTHORS Thomas, R.S., Jochimu, R., Toru, N., Karen, B.C., Greg, B.M.,
        Calvin, B.H. and William, H.A.
TITLE Human telomerase catalytic subunit promoter
JOURNAL Patent: JP 1999253177-A 254 21-SEP-1999;
COMMENT JERON CORP, UNIVERSITY TECHNOLOGY CORP
        OS Unidentified
        PN JP 1999253177-A/254
        PD 21-SEP-1999
        PF 15-OCT-1998 JP 1998320169
        PR 01-OCT-1996 US 08/724,643, 18-APR-1997 US 08/844,419, PR
        25-APR-1997 US 08/846,017, 06-MAY-1997 US 08/851,843, PR
        09-MAY-1997 US 08/854,050, 14-AUG-1997 US 08/911,312, PR
        14-AUG-1997 US 08/912,951, 14-AUG-1997 US 08/915,503 PI THOMAS
        R SECHI, JOCHIMU RINGNER, TORU NAKAMURA, KAREN B CHAPMAN, PI GREG B
        MORIN.

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PI CALVIN B HAREL, WILLIAM H ANDREWS
PC C12N15/09, A61K31/70, A61K38/55, A61K39/395, A61K39/395, A61K48/00,
PC C12Q1/02, A61K31/70, A61K38/55, A61K39/395, A61K39/395, A61K48/00,
PC C12Q1/48, C12Q1/68, G01N33/15, G01N33/48, G01N33/50, C07K14/47, PC
C07K16/40,
PC C12N1/19, C12N1/21, C12N5/10, C12N9/12, C12P21/08, (C12N1/19, PC
C12R1:84),
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PC (C12N9/12, C12R1:91), C12N15/00, A61K37/64, C12N5/00 CC
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CC Topology: Linear;
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QY 145 CTTCCACCGTTCATCTAGAGCAAC 170
Db 26 CTTCCACCGTTCATCTAGAGCAAC 1
RESULT 80
I31770/c 26 bp DNA linear PAT 06-FEB-1997
LOCUS
DEFINITION Sequence 23 from patent US 5583016.
ACCESSION I31770
VERSION I31770.1 GI:1822561
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1 (bases 1 to 26)
AUTHORS Villeponteau, B., Feng, J., Funk, W. and Andrews, W.H.
TITLE Mammalian telomerase
JOURNAL Patent: US 5583016-A 23 10-DEC-1996;
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QY 145 CTTCCACCGTTCATCTAGAGCAAC 170
Db 26 CTTCCACCGTTCATCTAGAGCAAC 1
RESULT 81
AR243518 26 bp DNA linear PAT 20-DEC-2002
LOCUS
DEFINITION Sequence 311 from patent US 6475789.
ACCESSION AR243518
VERSION AR243518.1 GI:27290729
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1 (bases 1 to 26)
AUTHORS Cech, T.R., Lingner, J., Nakamura, T., Chapman, K.B., Morin, G.B.,
Harley, C.B. and Andrews, W.H.
TITLE Human telomerase catalytic subunit: diagnostic and therapeutic
methods
JOURNAL Patent: US 6475789-A 311 05-NOV-2002;
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    Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 145 CTTCCACCGTTCATCTAGAGCAAC 170
Db 26 CTTCCACCGTTCATCTAGAGCAAC 1
RESULT 82
AR243519/c 26 bp DNA linear PAT 20-DEC-2002
LOCUS
DEFINITION Sequence 312 from patent US 6475789.
ACCESSION AR243519
VERSION AR243519.1 GI:27290730
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1 (bases 1 to 26)
AUTHORS Cech, T.R., Lingner, J., Nakamura, T., Chapman, K.B., Morin, G.B.,
Harley, C.B. and Andrews, W.H.
TITLE Human telomerase catalytic subunit: diagnostic and therapeutic
methods
JOURNAL Patent: US 6475789-A 312 05-NOV-2002;
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QY 145 CTTCCACCGTTCATCTAGAGCAAC 170
Db 26 CTTCCACCGTTCATCTAGAGCAAC 1
RESULT 83
AR306473/c 26 bp DNA linear PAT 12-JUN-2003
LOCUS
DEFINITION Sequence 23 from patent US 6548298.
ACCESSION AR306473
VERSION AR306473.1 GI:31696312
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1 (bases 1 to 26)
AUTHORS Villeponteau, B., Feng, J., Funk, W. and Andrews, W.H.
TITLE Mammalian telomerase
JOURNAL Patent: US 6548298-A 23 15-APR-2003;
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    Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 145 CTTCCACCGTTCATCTAGAGCAAC 170
Db 26 CTTCCACCGTTCATCTAGAGCAAC 1
RESULT 84
AR243518 26 bp DNA linear PAT 20-DEC-2002
LOCUS
DEFINITION Sequence 311 from patent US 6475789.
ACCESSION AR243518
VERSION AR243518.1 GI:27290729
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1 (bases 1 to 26)
AUTHORS Cech, T.R., Lingner, J., Nakamura, T., Chapman, K.B., Morin, G.B.,
Harley, C.B. and Andrews, W.H.
TITLE Human telomerase catalytic subunit: diagnostic and therapeutic
methods
JOURNAL Patent: US 6475789-A 311 05-NOV-2002;
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    Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 45 TCTAACCCCTAACTGAGAGGGCGGTAG 70
Db 1 TCTAACCCCTAACTGAGAGGGCGGTAG 26
RESULT 82
AR243519/c 26 bp DNA linear PAT 20-DEC-2002
LOCUS
DEFINITION Sequence 312 from patent US 6475789.
ACCESSION AR243519
VERSION AR243519.1 GI:27290730
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1 (bases 1 to 26)
AUTHORS Cech, T.R., Lingner, J., Nakamura, T., Chapman, K.B., Morin, G.B.,
Harley, C.B. and Andrews, W.H.
TITLE Human telomerase catalytic subunit: diagnostic and therapeutic
methods
JOURNAL Patent: US 6475789-A 312 05-NOV-2002;
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QY 145 CTTCCACCGTTCATCTAGAGCAAC 170
Db 26 CTTCCACCGTTCATCTAGAGCAAC 1
RESULT 83
AR306473/c 26 bp DNA linear PAT 12-JUN-2003
LOCUS
DEFINITION Sequence 23 from patent US 6548298.
ACCESSION AR306473
VERSION AR306473.1 GI:31696312
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1 (bases 1 to 26)
AUTHORS Villeponteau, B., Feng, J., Funk, W. and Andrews, W.H.
TITLE Mammalian telomerase
JOURNAL Patent: US 6548298-A 23 15-APR-2003;
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    Best Local Similarity 100.0%; Pred. No. 56;
    Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 145 CTTCCACCGTTCATCTAGAGCAAC 170
Db 26 CTTCCACCGTTCATCTAGAGCAAC 1
RESULT 84
AR243518 26 bp DNA linear PAT 20-DEC-2002
LOCUS
DEFINITION Sequence 311 from patent US 6475789.
ACCESSION AR243518
VERSION AR243518.1 GI:27290729
KEYWORDS
SOURCE
ORGANISM
REFERENCE 1 (bases 1 to 26)
AUTHORS Cech, T.R., Lingner, J., Nakamura, T., Chapman, K.B., Morin, G.B.,
Harley, C.B. and Andrews, W.H.
TITLE Human telomerase catalytic subunit: diagnostic and therapeutic
methods
JOURNAL Patent: US 6475789-A 311 05-NOV-2002;
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AR306480
LOCUS AR306480 26 bp DNA linear PAT 12-JUN-2003
DEFINITION Sequence 30 from patent US 6548298.
ACCESSION AR306480
VERSION AR306480.1 GI:31696319
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 26)
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE Mammalian telomerase
JOURNAL Patent: US 6548298-A 30 15-APR-2003;
FEATURES Location/Qualifiers
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Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 56;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 45 TCTAACCCCTAACTGAGAGGGCGTAG 70
Db 1 TCTAACCCCTAACTGAGAGGGCGTAG 26

RESULT 85
AR369722 AR369722 26 bp DNA linear PAT 12-SEP-2003
LOCUS AR369722
DEFINITION Sequence 25 from patent US 6300110.
ACCESSION AR369722
VERSION AR369722.1 GI:34606061
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 26)
AUTHORS Villeponteau,B., Feng,J., Andrews,W.H. and Adams,R.R.
TITLE Peptides related to TPC2 and TPC3, two proteins that are
coexpressed with telomerase activity
JOURNAL Patent: US 6300110-A 25 09-OCT-2001;
FEATURES Location/Qualifiers
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Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 56;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 45 TCTAACCCCTAACTGAGAGGGCGTAG 70
Db 1 TCTAACCCCTAACTGAGAGGGCGTAG 26

RESULT 86
AR369723/c AR369723 26 bp DNA linear PAT 12-SEP-2003
LOCUS AR369723
DEFINITION Sequence 26 from patent US 6300110.
ACCESSION AR369723
VERSION AR369723.1 GI:34606063
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 26)
AUTHORS Villeponteau,B., Feng,J., Andrews,W.H. and Adams,R.R.
TITLE Peptides related to TPC2 and TPC3, two proteins that are
coexpressed with telomerase activity
JOURNAL Patent: US 6300110-A 26 09-OCT-2001;
FEATURES Location/Qualifiers
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Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 56;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 26 CTTCCACCGTTTCATTCTAGAGCAAC 1

RESULT 87
AR370169/c AR370169 26 bp DNA linear PAT 12-SEP-2003
LOCUS AR370169
DEFINITION Sequence 4 from patent US 6300131.
ACCESSION AR370169
VERSION AR370169.1 GI:34606664
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 26)
AUTHORS Greider,C.W. and Le,S.
TITLE Telomerase-associated proteins
JOURNAL Patent: US 6300131-A 4 09-OCT-2001;
FEATURES Location/Qualifiers
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Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 56;
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Oy 145 CTTCCACCGTTTCATTCTAGAGCAAC 170
Db 26 CTTCCACCGTTTCATTCTAGAGCAAC 1

RESULT 88
AR381129 AR381129 26 bp DNA linear PAT 18-DEC-2003
LOCUS AR381129
DEFINITION Sequence 4 from patent US 6607898.
ACCESSION AR381129
VERSION AR381129.1 GI:40088890
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 26)
AUTHORS Kopraski,M.S. and Gocke,C.D.
TITLE Method for detection of hTR and hTERT telomerase-associated RNA in
plasma or serum
JOURNAL Patent: US 6607898-A 4 19-AUG-2003;
FEATURES Location/Qualifiers
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Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 56;
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Oy 45 TCTAACCCCTAACTGAGAGGGCGTAG 70
Db 1 TCTAACCCCTAACTGAGAGGGCGTAG 26

RESULT 89
AR381130/c AR381130 26 bp DNA linear PAT 18-DEC-2003
LOCUS AR381130
DEFINITION Sequence 5 from patent US 6607898.
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ACCESSION AR381130  
VERSION AR381130.1 GI:40088891  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 26)  
AUTHORS Koprski,M.S. and Gocke,C.D.  
TITLE Method for detection of hTR and hTERT telomerase-associated RNA in plasma or serum  
JOURNAL Patent: US 6607898-A 5 19-AUG-2003;  
FEATURES Location/Qualifiers  
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Query Match 5.8%; Score 26; DB 1; Length 26;  
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Qy 145 CTTCCACCGTTTCATTCTAGAGCAAC 170  
Db 26 CTTCCACCGTTTCATTCTAGAGCAAC 1

RESULT 90  
AR390720  
LOCUS AR390720 26 bp DNA linear PAT 18-DEC-2003  
DEFINITION Sequence 597 from patent US 6610839.  
ACCESSION AR390720  
VERSION AR390720.1 GI:40112654  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 26)  
AUTHORS Morin,G.B. and Andrews,W.H.  
TITLE Promoter for telomerase reverse transcriptase  
JOURNAL Patent: US 6610839-A 597 26-AUG-2003;  
FEATURES Location/Qualifiers  
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Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 56;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 45 TCTAACCCCTAACTGAGAGGCGGTAG 70  
Db 1 TCTAACCCCTAACTGAGAGGCGGTAG 26

RESULT 91  
AR390721/c  
LOCUS AR390721 26 bp DNA linear PAT 18-DEC-2003  
DEFINITION Sequence 598 from patent US 6610839.  
ACCESSION AR390721  
VERSION AR390721.1 GI:40112656  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 26)  
AUTHORS Morin,G.B. and Andrews,W.H.  
TITLE Promoter for telomerase reverse transcriptase  
JOURNAL Patent: US 6610839-A 598 26-AUG-2003;  
FEATURES Location/Qualifiers  
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Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 56;  
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Qy 45 TCTAACCCCTAACTGAGAGGCGGTAG 70  
Db 1 TCTAACCCCTAACTGAGAGGCGGTAG 26

RESULT 92  
AR393334  
LOCUS AR393334 26 bp DNA linear PAT 18-DEC-2003  
DEFINITION Sequence 597 from patent US 6617110.  
ACCESSION AR393334  
VERSION AR393334.1 GI:40118738  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 26)  
AUTHORS Cech,T.R., Lingner,J., Nakamura,T., Chapman,K.B., Morin,G.B., Harley,C.B. and Andrews,W.H.  
TITLE Cells immortalized with telomerase reverse transcriptase for use in drug screening  
JOURNAL Patent: US 6617110-A 597 09-SEP-2003;  
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Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 56;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 45 TCTAACCCCTAACTGAGAGGCGGTAG 70  
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RESULT 93  
AR393335/c  
LOCUS AR393335 26 bp DNA linear PAT 18-DEC-2003  
DEFINITION Sequence 598 from patent US 6617110.  
ACCESSION AR393335  
VERSION AR393335.1 GI:40118740  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 26)  
AUTHORS Cech,T.R., Lingner,J., Nakamura,T., Chapman,K.B., Morin,G.B., Harley,C.B. and Andrews,W.H.  
TITLE Cells immortalized with telomerase reverse transcriptase for use in drug screening  
JOURNAL Patent: US 6617110-A 598 09-SEP-2003;  
FEATURES Location/Qualifiers  
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Best Local Similarity 100.0%; Pred. No. 56;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTTCATTCTAGAGCAAC 170  
Db 26 CTTCCACCGTTTCATTCTAGAGCAAC 1

RESULT 94  
AX022186  
LOCUS AX022186 26 bp DNA linear PAT 07-SEP-2000  
DEFINITION Sequence 25 from Patent EP0953042.  
ACCESSION AX022186

Best Local Similarity 100.0%; Pred. No. 56;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTTCATTCTAGAGCAAC 170  
Db 26 CTTCCACCGTTTCATTCTAGAGCAAC 1

RESULT 92  
AR393334  
LOCUS AR393334 26 bp DNA linear PAT 18-DEC-2003  
DEFINITION Sequence 597 from patent US 6617110.  
ACCESSION AR393334  
VERSION AR393334.1 GI:40118738  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 26)  
AUTHORS Cech,T.R., Lingner,J., Nakamura,T., Chapman,K.B., Morin,G.B., Harley,C.B. and Andrews,W.H.  
TITLE Cells immortalized with telomerase reverse transcriptase for use in drug screening  
JOURNAL Patent: US 6617110-A 597 09-SEP-2003;  
FEATURES Location/Qualifiers  
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Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 56;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 45 TCTAACCCCTAACTGAGAGGCGGTAG 70  
Db 1 TCTAACCCCTAACTGAGAGGCGGTAG 26

RESULT 93  
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LOCUS AR393335 26 bp DNA linear PAT 18-DEC-2003  
DEFINITION Sequence 598 from patent US 6617110.  
ACCESSION AR393335  
VERSION AR393335.1 GI:40118740  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 26)  
AUTHORS Cech,T.R., Lingner,J., Nakamura,T., Chapman,K.B., Morin,G.B., Harley,C.B. and Andrews,W.H.  
TITLE Cells immortalized with telomerase reverse transcriptase for use in drug screening  
JOURNAL Patent: US 6617110-A 598 09-SEP-2003;  
FEATURES Location/Qualifiers  
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Best Local Similarity 100.0%; Pred. No. 56;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTTCATTCTAGAGCAAC 170  
Db 26 CTTCCACCGTTTCATTCTAGAGCAAC 1

RESULT 94  
AX022186  
LOCUS AX022186 26 bp DNA linear PAT 07-SEP-2000  
DEFINITION Sequence 25 from Patent EP0953042.  
ACCESSION AX022186

VERSION AX022186.1 GI:10045854  
KEYWORDS  
SOURCE unidentified  
ORGANISM unidentified  
REFERENCE 1  
AUTHORS Andrews, W.H., Villeponteau, B., Adams, R.R. and Feng, J.  
TITLE Methods and reagents for regulating telomere length and telomerase activity  
JOURNAL Patent: EP 0953042-A 25 03-NOV-1999;  
GERON CORP (US)  
FEATURES Location/Qualifiers  
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Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 56;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 45 TCTAACCCCTAACTGAGAGGCGGTAG 70  
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Db 1 TCTAACCCCTAACTGAGAGGCGGTAG 26

RESULT 95  
AX022187/c  
LOCUS AX022187 26 bp DNA linear PAT 07-SEP-2000  
DEFINITION Sequence 26 from Patent EP0953042.  
ACCESSION AX022187  
VERSION AX022187.1 GI:10045855  
KEYWORDS  
SOURCE unidentified  
ORGANISM unidentified  
REFERENCE 1  
AUTHORS Andrews, W.H., Villeponteau, B., Adams, R.R. and Feng, J.  
TITLE Methods and reagents for regulating telomere length and telomerase activity  
JOURNAL Patent: EP 0953042-A 26 03-NOV-1999;  
GERON CORP (US)  
FEATURES Location/Qualifiers  
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/db\_xref="taxon:32644"

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 56;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATCTCTAGAGCAAC 170  
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Db 26 CTTCCACCGTTCATCTCTAGAGCAAC 1

RESULT 96  
AX033376  
LOCUS AX033376 26 bp DNA linear PAT 21-SEP-2000  
DEFINITION Sequence 8 from Patent WO0046601.  
ACCESSION AX033376  
VERSION AX033376.1 GI:10280150  
KEYWORDS  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1  
AUTHORS Larsen, F. and Skaanseng, M.  
TITLE Detecting telomerase activity  
JOURNAL Patent: WO 0046601-A 8 10-AUG-2000;  
LARSEN FRANK (NO) ; SKAANSENG MARIANNE (NO)  
FEATURES Location/Qualifiers

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/note="PCR primer"

Query Match 5.8%; Score 26; DB 1; Length 26;  
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Qy 45 TCTAACCCCTAACTGAGAGGCGGTAG 70  
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Db 1 TCTAACCCCTAACTGAGAGGCGGTAG 26

RESULT 97  
AX033377/c  
LOCUS AX033377 26 bp DNA linear PAT 21-SEP-2000  
DEFINITION Sequence 9 from Patent WO0046601.  
ACCESSION AX033377  
VERSION AX033377.1 GI:10280151  
KEYWORDS  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1  
AUTHORS Larsen, F. and Skaanseng, M.  
TITLE Detecting telomerase activity  
JOURNAL Patent: WO 0046601-A 9 10-AUG-2000;  
LARSEN FRANK (NO) ; SKAANSENG MARIANNE (NO)  
FEATURES Location/Qualifiers  
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Qy 145 CTTCCACCGTTCATCTCTAGAGCAAC 170  
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Db 26 CTTCCACCGTTCATCTCTAGAGCAAC 1

RESULT 98  
AX317988  
LOCUS AX317988 26 bp DNA linear PAT 14-DEC-2001  
DEFINITION Sequence 1 from Patent WO0190409.  
ACCESSION AX317988  
VERSION AX317988.1 GI:17900797  
KEYWORDS  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1  
AUTHORS Chen, X.Q. and Anker, P.  
TITLE Cancer diagnosis method  
JOURNAL Patent: WO 0190409-A 1 29-NOV-2001;  
Chen, Xu Qi (US) ; Stroun, Maurice (CH) ; Anker, Philippe (CH)  
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Best Local Similarity 100.0%; Pred. No. 56;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 60 GAGGGCGTAGGCGCGTCTTTTGC 85  
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Db      1  GAAGGGCGTAGGCGCGTGTTC 26

RESULT 99
AX468454
LOCUS      26 bp      DNA      linear      PAT 16-JUL-2002
DEFINITION Sequence 4 from Patent WO0218652.
ACCESSION AX468454
VERSION    AX468454.1 GI:21901290
KEYWORDS   .
SOURCE     Homo sapiens (human)
ORGANISM   Homo sapiens
            Eukaryota; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE  1
AUTHORS    Kopreski,M.S. and Gocke,C.D.
TITLE      Method for detection of htr and htert telomerase-associated rna in
            plasma or serum
JOURNAL    Patent: WO 0218652-A 4 07-MAR-2002;
            Oncomedx, Inc. (US)
FEATURES   source
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Query Match      5.8%; Score 26; DB 1; Length 26;
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QY      45  TCTAACCCCTAACTGAGAGGGCGGTAG 70
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Db      1  TCTAACCCCTAACTGAGAGGGCGGTAG 26

RESULT 100
AX468455/c
LOCUS      26 bp      DNA      linear      PAT 16-JUL-2002
DEFINITION Sequence 5 from Patent WO0218652.
ACCESSION AX468455
VERSION    AX468455.1 GI:21901291
KEYWORDS   .
SOURCE     Homo sapiens (human)
ORGANISM   Homo sapiens
            Eukaryota; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE  1
AUTHORS    Kopreski,M.S. and Gocke,C.D.
TITLE      Method for detection of htr and htert telomerase-associated rna in
            plasma or serum
JOURNAL    Patent: WO 0218652-A 5 07-MAR-2002;
            Oncomedx, Inc. (US)
FEATURES   source
            Location/Qualifiers
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Query Match      5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 56;
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QY      45  TCTAACCCCTAACTGAGAGGGCGGTAG 70
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Db      1  TCTAACCCCTAACTGAGAGGGCGGTAG 26

RESULT 101
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DEFINITION Sequence 5 from Patent WO0218652.
ACCESSION AX468455
VERSION    AX468455.1 GI:21901291
KEYWORDS   .
SOURCE     Homo sapiens (human)
ORGANISM   Homo sapiens
            Eukaryota; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE  1
AUTHORS    Kopreski,M.S. and Gocke,C.D.
TITLE      Method for detection of htr and htert telomerase-associated rna in
            plasma or serum
JOURNAL    Patent: WO 0218652-A 5 07-MAR-2002;
            Oncomedx, Inc. (US)
FEATURES   source
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Query Match      5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 56;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      145  CTTCCACCGTTCATCTCTAGAGCAAC 170
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Db      26  CTTCCACCGTTCATCTCTAGAGCAAC 1

RESULT 101
AX810634
LOCUS      26 bp      DNA      linear      PAT 25-NOV-2003
DEFINITION Sequence 599 from Patent EP1333094.
ACCESSION AX810634
VERSION    AX810634.1 GI:38524119

KEYWORDS   .
SOURCE     Unidentified
ORGANISM   OS
            Unidentified
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KEYWORDS   .
SOURCE     unidentified
ORGANISM   unidentified
REFERENCE  1
AUTHORS    Cech,T.R., Lingner,J., Nakamura,T., Chapman,K.B., Morin,G.B.,
            Harley,C.B. and Andrews,W.H.
TITLE      Human telomerase catalytic subunit
JOURNAL    Patent: EP 1333094-A 599 06-AUG-2003;
            Geron Corporation (US); University Technology Corporation (US)
FEATURES   source
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Query Match      5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 56;
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QY      45  TCTAACCCCTAACTGAGAGGGCGGTAG 70
          |||||
Db      1  TCTAACCCCTAACTGAGAGGGCGGTAG 26

RESULT 102
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LOCUS      26 bp      DNA      linear      PAT 25-NOV-2003
DEFINITION Sequence 600 from Patent EP1333094.
ACCESSION AX810635
VERSION    AX810635.1 GI:38524120
KEYWORDS   .
SOURCE     unidentified
ORGANISM   unidentified
REFERENCE  1
AUTHORS    Cech,T.R., Lingner,J., Nakamura,T., Chapman,K.B., Morin,G.B.,
            Harley,C.B. and Andrews,W.H.
TITLE      Human telomerase catalytic subunit
JOURNAL    Patent: EP 1333094-A 600 06-AUG-2003;
            Geron Corporation (US); University Technology Corporation (US)
FEATURES   source
            Location/Qualifiers
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Query Match      5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 56;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      145  CTTCCACCGTTCATCTCTAGAGCAAC 170
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Db      26  CTTCCACCGTTCATCTCTAGAGCAAC 1

RESULT 103
BD011296
LOCUS      26 bp      DNA      linear      PAT 31-JAN-2002
DEFINITION Human telomerase catalytic subunit.
ACCESSION BD011296
VERSION    BD011296.1 GI:18639669
KEYWORDS   JP 2001081042-A/253.
SOURCE     unidentified
ORGANISM   unclassified
            1 (bases 1 to 26)
REFERENCE  1
AUTHORS    Seki,T.N., Lingner,J., Nakamura,T., Chapman,K.B., Mori,G.B.,
            Harley,C.B. and Andrews,W.H.
TITLE      Human telomerase catalytic subunit
JOURNAL    Patent: JP 2001081042-A 253 27-MAR-2001;
            GERON CORP, UNIVERSITY TECHNOLOGY CORP
COMMENT    OS
            Unidentified
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PN JP 2001081042-A/253
PD 27-MAR-2001
PF 27-JUL-2000 JP 2000227474
PR 01-OCT-1996 US 08/724643,18-APR-1997 US 08/844419 PR
25-APR-1997 US 08/846017,06-MAY-1997 US 08/851843 PR
09-MAY-1997 US 08/854050,14-AUG-1997 US 08/911312 PR
14-AUG-1997 US 08/912951,14-AUG-1997 US 08/915503 PI THOMAS
R SECHI, JOACHIM LINGNER, TORU NAKAMURA, KAREN B CHAPMAN, PI GREG B
MORIN,
PI CALVIN B HARLEY, WILLIAM H ANDREWS
PC A61K38/00,A61K31/7088,A61K39/00,A61K48/00,A61P35/00,A61P43/00,
PC C07K5/10,
PC C07K5/107,C07K5/117,C07K7/06,C07K7/08,C07K16/40,C12N9/12, PC
C12N15/09,
PC C12Q1/02,C12Q1/48,C12Q1/68,G01N33/15,G01N33/50,G01N33/53, PC
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CC Topology: Linear;
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Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 45 TCTAACCTTAAGGAGGCGTAG 70
Db 1 TCTAACCTTAAGGAGGCGTAG 26
RESULT 104
BD011297/c
LOCUS Human telomerase catalytic subunit. 26 bp DNA linear PAT 31-JAN-2002
DEFINITION
ACCESSION BD011297
VERSION BD011297.1 GI:18639670
KEYWORDS JP 2001081042-A/254.
SOURCE unidentified
ORGANISM unclassified.
REFERENCE 1 (bases 1 to 26)
AUTHORS Sechi,T.R., Lingner,J., Nakamura,T., Chapman,K.B., Mori,G.B.,
TITLE Human telomerase catalytic subunit
JOURNAL Patent: JP 2001081042-A 254 27-MAR-2001;
COMMENT GERON CORP, UNIVERSITY TECHNOLOGY CORP
OS Unidentified
PN JP 2001081042-A/254
PD 27-MAR-2001
PF 27-JUL-2000 JP 2000227474
PR 01-OCT-1996 US 08/724643,18-APR-1997 US 08/844419 PR
25-APR-1997 US 08/846017,06-MAY-1997 US 08/851843 PR
09-MAY-1997 US 08/854050,14-AUG-1997 US 08/911312 PR
14-AUG-1997 US 08/912951,14-AUG-1997 US 08/915503 PI THOMAS
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MORIN,
PI CALVIN B HARLEY, WILLIAM H ANDREWS
PC A61K38/00,A61K31/7088,A61K39/00,A61K48/00,A61P35/00,A61P43/00,
PC C07K5/10,
PC C07K5/107,C07K5/117,C07K7/06,C07K7/08,C07K16/40,C12N9/12, PC
C12N15/09,
PC C12Q1/02,C12Q1/48,C12Q1/68,G01N33/15,G01N33/50,G01N33/53, PC
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CC Topology: Linear;

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Best Local Similarity 100.0%; Pred. No. 56;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 145 CTTCACCGTTCATTCTAGAGCAAC 170
Db 26 CTTCACCGTTCATTCTAGAGCAAC 1
RESULT 105
BD023721
LOCUS Method for detecting and inhibiting RNA component of telomerase. 26 bp DNA linear PAT 27-AUG-2002
DEFINITION
ACCESSION BD023721
VERSION BD023721.1 GI:22564944
KEYWORDS JP 2001507229-A/25.
SOURCE unidentified
ORGANISM unclassified.
REFERENCE 1 (bases 1 to 26)
AUTHORS Kim,N.W., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.
TITLE Method for detecting and inhibiting RNA component of telomerase
JOURNAL Patent: JP 2001507229-A 25 05-JUN-2001;
COMMENT GERON CORP
PN JP 2001507229-A/25
PD 05-JUN-2001
PF 19-DEC-1997 JP 1998529003
PR 20-DEC-1996 US 08/770564,20-DEC-1996 US 08/770565 PI
NAM WOO KIM,FRED WU,JAMES T KEALEY,RONALD PRUZAN,SCOTT L PI
WEINRICH
PC C12N15/09,A61K9/08,A61K31/7105,A61K45/00,A61K48/00,A61P35/00,
PC C12N5/10,
PC C12N9/12,C12Q1/68,C12Q1/68,C12N15/00,C12N5/00 CC
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CC Topology: Linear;
CC /note= 'htr forward primer'
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Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 60 GAAGGGCGTAGGGCGCGTCTTTTGC 85
Db 1 GAAGGGCGTAGGGCGCGTCTTTTGC 26
RESULT 106
BD131325
LOCUS Telomerase assay of bodily fluid for cancer screening and 26 bp DNA linear PAT 18-SEP-2002
DEFINITION evaluation of disease phase and prognosis.
ACCESSION BD131325
VERSION BD131325.1 GI:23226270
KEYWORDS JP 2002503480-A/3.
SOURCE synthetic construct
ORGANISM synthetic construct
REFERENCE 1 (bases 1 to 26)

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AUTHORS Strovel,J.W., Stamberg,J., Highsmith,E. and Abruzzo,L.V.  
TITLE Telomerase assay of bodily fluid for cancer screening and evaluation of disease phase and prognosis  
JOURNAL Patent: JP 2002503480-A 3 05-FEB-2002;  
UNIVERSITY OF MARYLAND BALTIMORE  
COMMENT OS Artificial Sequence  
PN JP 2002503480-A/3  
PD 05-FEB-2002  
PF 16-FEB-1999 JP 2000531587  
PR 16-FEB-1998 US 60/074793  
PI JEFFREY W STROVEL,JUDITH STAMBERG,EDWARD HIGHSMITH,LYNNE V PI ABRUZZO  
PC C12Q1/68,C12N15/09,C12P19/34,C12N15/00  
CC Description of Artificial Sequence: F3b, synthesized, Gibco-  
CC BRL  
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Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 56;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 45 TCTAACCCCTAACTGAGAGGGCGTAG 70  
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Db 1 TCTAACCCCTAACTGAGAGGGCGTAG 26

RESULT 107  
BD225817/c  
LOCUS Promoter region of mouse and human telomerase RNA component genes.  
DEFINITION BD225817  
ACCESSION BD225817.1 GI:33035587  
VERSION BD225817.1  
KEYWORDS JP 2002509699-A/20.  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 25)  
AUTHORS Keith,W.N.  
TITLE Promoter region of mouse and human telomerase RNA component genes  
JOURNAL Patent: JP 2002509699-A 20 02-APR-2002;  
CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD  
COMMENT OS Artificial Sequence  
PN JP 2002509699-A/20  
PD 02-APR-2002  
PF 29-JAN-1999 JP 2000529424  
PR 29-JAN-1998 GB 9801902.9  
PI WILLIAM NICOL KEITH

PC C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00, PC A61K48/00,  
PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC C12Q1/68/C12N9/12  
PC (A61K35/76,A61K31:522),C12N15/00,A61K37/02,C12N5/00 CC Description of Artificial Sequence: Primer  
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Query Match 5.5%; Score 25; DB 1; Length 25;  
Best Local Similarity 100.0%; Pred. No. 63;  
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 175 AATGTCAGCTGCTGGCCGCTTGCC 199  
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Db 25 AATGTCAGCTGCTGGCCGCTTGCC 1

RESULT 108  
AX019566/c  
LOCUS AX019566 25 bp DNA linear PAT 07-SEP-2000  
DEFINITION Sequence 20 from Patent WO938964.  
ACCESSION AX019566  
VERSION AX019566.1 GI:10043480  
KEYWORDS .  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.  
REFERENCE 1  
AUTHORS Keith,W.N.  
TITLE Promoter regions of the mouse and human telomerase rna component genes  
JOURNAL Patent: WO 938964-A 20 05-AUG-1999;  
KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)  
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/note="primer"

Query Match 5.5%; Score 25; DB 1; Length 25;  
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Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 175 AATGTCAGCTGCTGGCCGCTTGCC 199  
|||||  
Db 25 AATGTCAGCTGCTGGCCGCTTGCC 1

RESULT 109  
BD071073  
LOCUS Modulation of mammalian telomerase by peptide nucleic acids.  
DEFINITION BD071073  
ACCESSION BD071073.1 GI:22616676  
VERSION BD071073.1  
KEYWORDS JP 2001517929-A/39.  
SOURCE unidentified  
ORGANISM unidentified  
REFERENCE 1 (bases 1 to 25)  
AUTHORS Shay,J.W., Wright,W.E., Piatyszek,M.A., Corey,D. and Norton,J.C.  
TITLE Modulation of mammalian telomerase by peptide nucleic acids  
JOURNAL Patent: JP 2001517929-A 39 09-OCT-2001;  
GERON CORP  
COMMENT OS Unidentified  
PN JP 2001517929-A/39  
PD 09-OCT-2001  
PF 09-APR-1997 JP 1997536487  
PR 09-APR-1996 US 08/630019  
PI JERRY W SHAY,WOODRING E WRIGHT,MIECZYSLAW A PIATYSZEK,DAVID PI COREY,  
PI JAMES C NORTON  
PC C07K14/00,A61K38/16,C12Q1/68  
CC C07K14/00,A61K38/16,C12Q1/68  
CC Strandedness: Single;  
CC Topology: Linear;  
CC Modulation of mammalian telomerase by peptide nucleic acids FH  
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/db\_xref="taxon:32644"

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Qy 41 TTTGCTTAACCTTAACCTGAGAAGG 65
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Db 1 TTTGCTTAACCTTAACCTGAGAAGG 25

RESULT 110
LOCUS AR016060/c 28 bp DNA linear PAT 05-DEC-1998
DEFINITION Sequence 28 from patent US 5776679.
ACCESSION AR016060
VERSION AR016060.1 GI:3972337
KEYWORDS
SOURCE
ORGANISM
REFERENCE
1 (bases 1 to 28)
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE Assays for the DNA component of human telomerase
JOURNAL Patent: US 5776679-A 28 07-JUL-1998;
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Query Match      5.5%; Score 25; DB 1; Length 28;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 81 TTTGCTCCCGCGCGCTGTTTTCT 105
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Db 25 TTTGCTCCCGCGCGCTGTTTTCT 1

RESULT 111
LOCUS AR075532/c 28 bp DNA linear PAT 30-AUG-2000
DEFINITION Sequence 29 from patent US 5958680.
ACCESSION AR075532
VERSION AR075532.1 GI:10002280
KEYWORDS
SOURCE
ORGANISM
REFERENCE
1 (bases 1 to 28)
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE Mammalian telomerase
JOURNAL Patent: US 5958680-A 29 28-SEP-1999;
FEATURES
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Location/Qualifiers
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Query Match      5.5%; Score 25; DB 1; Length 28;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 81 TTTGCTCCCGCGCGCTGTTTTCT 105
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Db 25 TTTGCTCCCGCGCGCTGTTTTCT 1

RESULT 112
LOCUS BD176170/c 28 bp DNA linear PAT 18-MAR-2003
DEFINITION Mammalian telomerase.
ACCESSION BD176170
VERSION BD176170.1 GI:29121876
KEYWORDS JP 2002272489-A/29.

Query Match      5.5%; Score 25; DB 1; Length 28;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 81 TTTGCTCCCGCGCGCTGTTTTCT 105
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Db 25 TTTGCTCCCGCGCGCTGTTTTCT 1

RESULT 114
LOCUS AR063826/c 30 bp DNA linear PAT 29-SEP-1999
DEFINITION Sequence 2 from patent US 5846723.
ACCESSION AR063826
VERSION AR063826.1 GI:5993134
KEYWORDS
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ORGANISM unidentified
REFERENCE 1 (bases 1 to 28)
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE Mammalian telomerase
JOURNAL Patent: JP 2002272489-A 29 24-SEP-2002;
COMMENT
OS Unidentified
PN JP 2002272489-A/29
PD 24-SEP-2002
PF 06-MAR-2002 JP 2002061125
PR 07-JUL-1994 US 08/272102,27-OCT-1994 US 08/330123 PR
07-JUN-1995 US 08/472802,07-JUN-1995 US 08/482115 PI BRYANT
VILLEPONTEAU, JUNLI FENG, WALTER FUNK, WILLIAM H ANDREWS PC
C12N15/09,C12N9/99,C12Q1/68,G01N33/53,G01N33/566,C12N15/00 CC
Strandedness: Single;
CC Topology: Linear;
CC Mammalian telomerase
FH Key Location/Qualifiers
FT source 1..28
/organism='Unidentified'.
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source
Location/Qualifiers
1..28
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"

Query Match      5.5%; Score 25; DB 1; Length 28;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 81 TTTGCTCCCGCGCGCTGTTTTCT 105
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Db 25 TTTGCTCCCGCGCGCTGTTTTCT 1

RESULT 113
LOCUS AR306479/c 28 bp DNA linear PAT 12-JUN-2003
DEFINITION Sequence 29 from patent US 6548298.
ACCESSION AR306479
VERSION AR306479.1 GI:31696318
KEYWORDS
SOURCE
ORGANISM
REFERENCE
1 (bases 1 to 28)
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE Mammalian telomerase
JOURNAL Patent: US 6548298-A 29 15-APR-2003;
FEATURES
source
Location/Qualifiers
1..28
/organism="unknown"
/mol_type="genomic DNA"

Query Match      5.5%; Score 25; DB 1; Length 28;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 81 TTTGCTCCCGCGCGCTGTTTTCT 105
    |||||
Db 25 TTTGCTCCCGCGCGCTGTTTTCT 1

RESULT 114
LOCUS AR063826/c 30 bp DNA linear PAT 29-SEP-1999
DEFINITION Sequence 2 from patent US 5846723.
ACCESSION AR063826
VERSION AR063826.1 GI:5993134
KEYWORDS
SOURCE
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Query Match      5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGGCGTA 69
|||||
Db 24 CTAACCCCTAACTGAGAGGGCGTA 1

RESULT 118
BD225816      24 bp DNA linear PAT 17-JUL-2003
LOCUS Promoter region of mouse and human telomerase RNA component genes.
DEFINITION BD225816
ACCESSION BD225816.1 GI:33035586
KEYWORDS JP 2002509699-A/19.
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 24)
AUTHORS Keith,W.N.
TITLE Promoter region of mouse and human telomerase RNA component genes
JOURNAL Patent: JP 2002509699-A 19 02-APR-2002;
CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD
OS Artificial Sequence
PN JP 2002509699-A/19
PD 02-APR-2002
PF 29-JAN-1999 JP 2000529424
PR 29-JAN-1998 GB 9801902.9
PI WILLIAM NICOL KEITH
PC C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00,PC
A61K48/00,
PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC
.C12Q1/68//C12N9/12.
PC {A61K35/76,A61K31:522},C12N15/00,A61K37/02,C12N5/00 CC
Description of Artificial Sequence: Primer
FH Key Location/Qualifiers
FT source 1..24
FT /organism="Artificial Sequence".

FEATURES
source
1..24
Location/Qualifiers
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"

Query Match      5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGGCGTA 69
|||||
Db 1 CTAACCCCTAACTGAGAGGGCGTA 24

RESULT 119
BD225816      24 bp DNA linear PAT 20-DEC-2002
LOCUS Promoter region of mouse and human telomerase RNA component genes.
DEFINITION BD225816
ACCESSION BD225816.1 GI:33035586
KEYWORDS JP 2002509699-A/19.
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 24)
AUTHORS Keith,W.N.
TITLE Promoter region of mouse and human telomerase RNA component genes
JOURNAL Patent: JP 2002509699-A 19 02-APR-2002;
CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD
OS Artificial Sequence
PN JP 2002509699-A/19
PD 02-APR-2002
PF 29-JAN-1999 JP 2000529424
PR 29-JAN-1998 GB 9801902.9
PI WILLIAM NICOL KEITH
PC C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00,PC
A61K48/00,
PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC
.C12Q1/68//C12N9/12.
PC {A61K35/76,A61K31:522},C12N15/00,A61K37/02,C12N5/00 CC
Description of Artificial Sequence: Primer
FH Key Location/Qualifiers
FT source 1..24
FT /organism="Artificial Sequence".

FEATURES
source
1..24
Location/Qualifiers
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"

Query Match      5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGGCGTA 69
|||||
Db 1 CTAACCCCTAACTGAGAGGGCGTA 24

RESULT 120
BD225816      24 bp DNA linear PAT 20-DEC-2002
LOCUS Promoter region of mouse and human telomerase RNA component genes.
DEFINITION BD225816
ACCESSION BD225816.1 GI:33035586
KEYWORDS JP 2002509699-A/19.
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 24)
AUTHORS Keith,W.N.
TITLE Promoter region of mouse and human telomerase RNA component genes
JOURNAL Patent: JP 2002509699-A 19 02-APR-2002;
CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD
OS Artificial Sequence
PN JP 2002509699-A/19
PD 02-APR-2002
PF 29-JAN-1999 JP 2000529424
PR 29-JAN-1998 GB 9801902.9
PI WILLIAM NICOL KEITH
PC C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00,PC
A61K48/00,
PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC
.C12Q1/68//C12N9/12.
PC {A61K35/76,A61K31:522},C12N15/00,A61K37/02,C12N5/00 CC
Description of Artificial Sequence: Primer
FH Key Location/Qualifiers
FT source 1..24
FT /organism="Artificial Sequence".

FEATURES
source
1..24
Location/Qualifiers
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"

Query Match      5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGGCGTA 69
|||||
Db 24 CTAACCCCTAACTGAGAGGGCGTA 1

RESULT 121
BD225816      24 bp DNA linear PAT 07-SEP-2000
LOCUS Promoter region of the mouse and human telomerase rna component
genes
DEFINITION Sequence 3 from Patent WO9938964.
ACCESSION AX019549
VERSION AX019549.1 GI:10043463
KEYWORDS synthetic construct
SOURCE synthetic construct
other sequences; artificial sequences.
REFERENCE 1
AUTHORS Keith,W.N.
TITLE Promoter regions of the mouse and human telomerase rna component
genes
JOURNAL Patent: WO 9938964-A 3 05-AUG-1999;
KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)
OS Artificial Sequence
PN JP 2002509699-A/19
PD 02-APR-2002
PF 29-JAN-1999 JP 2000529424
PR 29-JAN-1998 GB 9801902.9
PI WILLIAM NICOL KEITH
PC C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00,PC
A61K48/00,
PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC
.C12Q1/68//C12N9/12.
PC {A61K35/76,A61K31:522},C12N15/00,A61K37/02,C12N5/00 CC
Description of Artificial Sequence: Primer
FH Key Location/Qualifiers
FT source 1..24
FT /organism="Artificial Sequence".

FEATURES
source
1..24
Location/Qualifiers
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
/notes="primer"

Query Match      5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGGCGTA 69
|||||
Db 24 CTAACCCCTAACTGAGAGGGCGTA 1

RESULT 122
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/mol_type="genomic DNA"

Query Match      5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 41 TTTGTCTAACCTTAACCTGAGAGG 64
|||||
Db 1 TTTGTCTAACCTTAACCTGAGAGG 24

RESULT 120
AR241178      24 bp DNA linear PAT 20-DEC-2002
LOCUS Sequence 5 from patent US 6468983.
DEFINITION AR241178
ACCESSION AR241178
VERSION AR241178.1 GI:27286408
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 24)
AUTHORS Silverman,R.H., Kondo,S., Cowell,J.K., Li,G. and Torrence,P.F.
TITLE RNase L activators and antisense oligonucleotides effective to
treat telomerase-expressing malignancies
JOURNAL Patent: US 6468983-A 5 22-OCT-2002;
FEATURES Location/Qualifiers
source 1..24
/mol_type="genomic DNA"

Query Match      5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 423 CGTGCACCCAGGACTCGGCTCACA 446
|||||
Db 24 CGTGCACCCAGGACTCGGCTCACA 1

RESULT 121
AX019549/c    24 bp DNA linear PAT 07-SEP-2000
LOCUS Sequence 3 from Patent WO9938964.
DEFINITION AX019549
ACCESSION AX019549
VERSION AX019549.1 GI:10043463
KEYWORDS synthetic construct
SOURCE synthetic construct
other sequences; artificial sequences.
REFERENCE 1
AUTHORS Keith,W.N.
TITLE Promoter regions of the mouse and human telomerase rna component
genes
JOURNAL Patent: WO 9938964-A 3 05-AUG-1999;
KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)
OS Artificial Sequence
PN JP 2002509699-A/19
PD 02-APR-2002
PF 29-JAN-1999 JP 2000529424
PR 29-JAN-1998 GB 9801902.9
PI WILLIAM NICOL KEITH
PC C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00,PC
A61K48/00,
PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC
.C12Q1/68//C12N9/12.
PC {A61K35/76,A61K31:522},C12N15/00,A61K37/02,C12N5/00 CC
Description of Artificial Sequence: Primer
FH Key Location/Qualifiers
FT source 1..24
FT /organism="Artificial Sequence".

FEATURES
source
1..24
Location/Qualifiers
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
/notes="primer"

Query Match      5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGGCGTA 69
|||||
Db 24 CTAACCCCTAACTGAGAGGGCGTA 1

RESULT 122
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AX019559/c
LOCUS          AX019559          24 bp      DNA          linear          PAT 07-SEP-2000
DEFINITION     Sequence 13 from Patent WO938964.
ACCESSION      AX019559
VERSION        AX019559.1  GI:10043473
KEYWORDS       .
SOURCE          synthetic construct
ORGANISM        other sequences; artificial sequences.
REFERENCE       1
AUTHORS         Keith,W.N.
TITLE           Promoter regions of the mouse and human telomerase rna component
JOURNAL         Patent: WO 938964-A 13 05-AUG-1999;
FEATURES        KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)
source          Location/Qualifiers
                1..24
                /organism="synthetic construct"
                /mol_type="unassigned DNA"
                /db_xref="taxon:32630"
                /note="primer"

Query Match      5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAAGGGCGTA 69
      |||||
Db 24 CTAACCCCTAACTGAGAAGGGCGTA 1

RESULT 123
LOCUS          AX019565          24 bp      DNA          linear          PAT 07-SEP-2000
DEFINITION     Sequence 19 from Patent WO938964.
ACCESSION      AX019565
VERSION        AX019565.1  GI:10043479
KEYWORDS       .
SOURCE          synthetic construct
ORGANISM        other sequences; artificial sequences.
REFERENCE       1
AUTHORS         Keith,W.N.
TITLE           Promoter regions of the mouse and human telomerase rna component
JOURNAL         Patent: WO 938964-A 19 05-AUG-1999;
FEATURES        KBITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)
source          Location/Qualifiers
                1..24
                /organism="synthetic construct"
                /mol_type="unassigned DNA"
                /db_xref="taxon:32630"
                /note="primer"

Query Match      5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAAGGGCGTA 69
      |||||
Db 1 CTAACCCCTAACTGAGAAGGGCGTA 24

RESULT 124
AX058270/c
LOCUS          AX058270          24 bp      DNA          linear          PAT 17-JAN-2001
DEFINITION     Sequence 5 from Patent WO0074667.
ACCESSION      AX058270
VERSION        AX058270.1  GI:12310769
KEYWORDS       .
SOURCE          synthetic construct
ORGANISM        other sequences; artificial sequences.
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REFERENCE       1
AUTHORS         Au,J.L. and Wientjes,G.
TITLE           Compositions active in telomere damage comprising a taxane and
                telomerase inhibitor
JOURNAL         Patent: WO 0074667-A 5 14-DEC-2000;
FEATURES        Au, Jessie L.S (US) ; Wientjes, Guillaume (US)
source          Location/Qualifiers
                1..24
                /organism="synthetic construct"
                /mol_type="unassigned DNA"
                /db_xref="taxon:32630"
                /note="primer/probe"

Query Match      5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 162 AGAGCAACAAAAAATGTCAGCTG 185
      |||||
Db 24 AGAGCAACAAAAAATGTCAGCTG 1

RESULT 125
LOCUS          BD071058          24 bp      DNA          linear          PAT 27-AUG-2002
DEFINITION     Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION      BD071058
VERSION        BD071058.1  GI:22616661
KEYWORDS       JP 2001517929-A/24.
SOURCE          unidentified
ORGANISM        unclassified.
REFERENCE       1 (bases 1 to 24)
AUTHORS         Shay,J.W., Wright,W.E., Piatyszek,M.A., Corey,D. and Norton,J.C.
TITLE           Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL         Patent: JP 2001517929-A 24 09-OCT-2001;
                GERON CORP
COMMENT          OS Unidentified
                PN JP 2001517929-A/24
                PD 09-OCT-2001
                PF 09-APR-1997 JP 1997536487
                PR 09-APR-1996 US 08/630019
                PI JERRY W SHAY,WOODRING E WRIGHT,MIECZYSLAW A PIATYSZEK,DAVID
                PI COREY,
                PI JAMES C NORTON
                PC C07K14/00,A61K38/16,C12Q1/68
                CC Strandedness: Single;
                CC Topology: Linear;
                CC /desc = 'peptide nucleic acid (PNA), where (deoxy(ribose- CC
                CC linkages are replaced by N-(2-aminoethyl)glycine units linked
                CC to
                CC nucleotide bases via glycine amino N through a CC
                methylenecarbonyl linker'
                FH Key Location/Qualifiers
                FT source 1..24
                FT /organism='Unidentified'.
FEATURES        Location/Qualifiers
source          1..24
                /organism="unidentified"
                /mol_type="genomic DNA"
                /db_xref="taxon:32644"

Query Match      5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 71;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 41 TTTCTCTAACCCCTAACTGAGAAGG 64
      |||||
Db 1 TTTCTCTAACCCCTAACTGAGAAGG 24

RESULT 126
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BD084640
LOCUS BD084640 24 bp DNA linear PAT 27-AUG-2002
DEFINITION Rnase L activators and antisense oligonucleotides effective to
treat telomerase-expressing malignancies.
ACCESSION BD084640
VERSION BD084640.1 GI:22630250
KEYWORDS JP 2001524100-A/4.
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 24)
AUTHORS Silverman,R.H., Kondo,S., Cowell,J.K., Li,G. and Torrence,P.F.
TITLE Rnase L activators and antisense oligonucleotides effective to
treat telomerase-expressing malignancies
JOURNAL Patent: JP 2001524100-A 4 27-NOV-2001;
THE CLEVELAND CLINIC FOUNDATION,NATIONAL INSTITUTES OF HEALTH
COMMENT OS Artificial Sequence
PN JP 2001524100-A/4
PD 27-NOV-2001
PF 13-APR-1998 JP 1998546125
PR 21-APR-1997 US 60/044507,03-FEB-1998 US 09/018125 PI
ROBERT H SILVERMAN,SEIJI KONDO,JOHN K COWELL,GUYING LI,PAUL F
PI TORRENCE
PC C07H21/00,C07H21/02,C12Q1/68,A61K48/00
CC Description of Artificial Sequence: primer
FH Key Location/Qualifiers
FT source 1..24
/organism='Artificial Sequence'.
FEATURES
source
1..24
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
Query Match 5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred.No.71;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 41 TTTGCTCTAACCCCTAACTGAGAAGG 64
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Db 1 TTTGCTCTAACCCCTAACTGAGAAGG 24
| | | | | | | | | | | | | | | | | |
RESULT 127
BD084641/c
LOCUS BD084641 24 bp DNA linear PAT 27-AUG-2002
DEFINITION Rnase L activators and antisense oligonucleotides effective to
treat telomerase-expressing malignancies.
ACCESSION BD084641
VERSION BD084641.1 GI:22630251
KEYWORDS JP 2001524100-A/5.
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 24)
AUTHORS Silverman,R.H., Kondo,S., Cowell,J.K., Li,G. and Torrence,P.F.
TITLE Rnase L activators and antisense oligonucleotides effective to
treat telomerase-expressing malignancies
JOURNAL Patent: JP 2001524100-A 5 27-NOV-2001;
THE CLEVELAND CLINIC FOUNDATION,NATIONAL INSTITUTES OF HEALTH
COMMENT OS Artificial Sequence
PN JP 2001524100-A/5
PD 27-NOV-2001
PF 13-APR-1997 US 60/044507,03-FEB-1998 US 09/018125 PI
ROBERT H SILVERMAN,SEIJI KONDO,JOHN K COWELL,GUYING LI,PAUL F
PI TORRENCE
PC C07H21/00,C07H21/02,C12Q1/68,A61K48/00
CC Description of Artificial Sequence: primer
FH Key Location/Qualifiers
FT source 1..24
/organism='Artificial Sequence'.
FEATURES
source
1..24
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
Query Match 5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred.No.71;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 41 TTTGCTCTAACCCCTAACTGAGAAGG 64
| | | | | | | | | | | | | | | | | |
Db 1 TTTGCTCTAACCCCTAACTGAGAAGG 24
| | | | | | | | | | | | | | | | | |
RESULT 127
BD084641/c
LOCUS BD084641 24 bp DNA linear PAT 27-AUG-2002
DEFINITION Rnase L activators and antisense oligonucleotides effective to
treat telomerase-expressing malignancies.
ACCESSION BD084641
VERSION BD084641.1 GI:22630251
KEYWORDS JP 2001524100-A/5.
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 24)
AUTHORS Silverman,R.H., Kondo,S., Cowell,J.K., Li,G. and Torrence,P.F.
TITLE Rnase L activators and antisense oligonucleotides effective to
treat telomerase-expressing malignancies
JOURNAL Patent: JP 2001524100-A 5 27-NOV-2001;
THE CLEVELAND CLINIC FOUNDATION,NATIONAL INSTITUTES OF HEALTH
COMMENT OS Artificial Sequence
PN JP 2001524100-A/5
PD 27-NOV-2001
PF 13-APR-1997 US 60/044507,03-FEB-1998 US 09/018125 PI
ROBERT H SILVERMAN,SEIJI KONDO,JOHN K COWELL,GUYING LI,PAUL F
PI TORRENCE
PC C07H21/00,C07H21/02,C12Q1/68,A61K48/00
CC Description of Artificial Sequence: primer
FH Key Location/Qualifiers
FT source 1..24
/organism='Artificial Sequence'.
FEATURES
source
1..24
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
Query Match 5.3%; Score 24; DB 1; Length 25;
Best Local Similarity 100.0%; Pred.No.74;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 145 CTTCCACCGTTCATTCTAGAGCAA 168
| | | | | | | | | | | | | | | | | |
Db 25 CTTCCACCGTTCATTCTAGAGCAA 2
| | | | | | | | | | | | | | | | | |
RESULT 129
BD071059
LOCUS BD071059 23 bp DNA linear PAT 27-AUG-2002
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION BD071059
VERSION BD071059.1 GI:22616662
KEYWORDS JP 2001517929-A/25.
SOURCE unidentified
ORGANISM unclassified.
REFERENCE 1 (bases 1 to 23)
AUTHORS Shay,J.W., Wright,W.E., Piatyszek,M.A., Corey,D. and Norton,J.C.
TITLE Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL Patent: JP 2001517929-A 25 OCT-2001;

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source
1..24
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
Query Match 5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred.No.71;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 423 CGTGACCCAGGACTCGGCTCACA 446
| | | | | | | | | | | | | | | | | |
Db 24 CGTGACCCAGGACTCGGCTCACA 1
| | | | | | | | | | | | | | | | | |
RESULT 128
BD131326/c
LOCUS BD131326 25 bp DNA linear PAT 18-SEP-2002
DEFINITION Telomerase assay of bodily fluid for cancer screening and
evaluation of disease phase and prognosis.
ACCESSION BD131326
VERSION BD131326.1 GI:23226271
KEYWORDS JP 2002503480-A/4.
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 25)
AUTHORS Strovel,J.W., Stamberg,J., Highsmith,E. and Abruzzo,L.V.
TITLE Telomerase assay of bodily fluid for cancer screening and
evaluation of disease phase and prognosis
JOURNAL Patent: JP 2002503480-A 4 05-FEB-2002;
UNIVERSITY OF MARYLAND BALTIMORE
COMMENT OS Artificial Sequence
PN JP 2002503480-A/4
PD 05-FEB-2002
PF 16-FEB-1999 JP 2000531587
PR 16-FEB-1998 US 60/074793
PI JEFFREY W STROVEL,JUDITH STAMBERG,EDWARD HIGHSMITH,LYNNE V PI
ABRUZZO
PC C12Q1/68,C12N15/09,C12P19/34,C12N15/00
CC Description of Artificial Sequence: R3c, synthesized, Gibco-
CC BRL
FH Key Location/Qualifiers
FT source 1..25
/organism='Artificial Sequence'.
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1..25
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
Query Match 5.3%; Score 24; DB 1; Length 25;
Best Local Similarity 100.0%; Pred.No.74;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 145 CTTCCACCGTTCATTCTAGAGCAA 168
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Db 25 CTTCCACCGTTCATTCTAGAGCAA 2
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RESULT 129
BD071059
LOCUS BD071059 23 bp DNA linear PAT 27-AUG-2002
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION BD071059
VERSION BD071059.1 GI:22616662
KEYWORDS JP 2001517929-A/25.
SOURCE unidentified
ORGANISM unclassified.
REFERENCE 1 (bases 1 to 23)
AUTHORS Shay,J.W., Wright,W.E., Piatyszek,M.A., Corey,D. and Norton,J.C.
TITLE Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL Patent: JP 2001517929-A 25 OCT-2001;

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GERON CORP  
 OS Unidentified  
 PN JP 2001517929-A/25  
 PD 09-OCT-2001  
 PF 09-APR-1997 JP 1997536487  
 PR 09-APR-1996 US 08/630019  
 PI JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID  
 PI COREY,  
 PI JAMES C NORTON  
 PC C07K14/00, A61K38/16, C12Q1/68  
 CC Strandedness: Single;  
 CC Topology: Linear;  
 CC /desc = 'peptide nucleic acid (PNA), where (deoxy(ribose- CC phosphate  
 CC linkages are replaced by N-(2-aminoethyl)glycine units linked  
 CC to  
 CC nucleotide bases via glycine amino N through a CC  
 methylencarbonyl linker'  
 FH Key Location/Qualifiers  
 FT source 1..23  
 FT /organism='Unidentified'.  
 FT Location/Qualifiers  
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 /organism='unidentified'  
 /mol\_type='genomic DNA'  
 /db\_xref='taxon:32644'

Query Match 5.1%; Score 23; DB 1; Length 23;  
 Best Local Similarity 100.0%; Pred. No. 80;  
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 35 CCATTTTGTCTAACCCCTAACT 57  
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 Db 1 CCATTTTGTCTAACCCCTAACT 23

RESULT 130  
 BD225841  
 LOCUS 25 bp DNA linear PAT 17-JUL-2003  
 DEFINITION Promoter region of mouse and human telomerase RNA component genes.  
 ACCESSION BD225841  
 VERSION BD225841.1 GI:33035611  
 KEYWORDS JP 2002509699-A/44.  
 SOURCE synthetic construct  
 ORGANISM other sequences; artificial sequences.  
 REFERENCE 1 (bases 1 to 25)  
 AUTHORS Keith, W.N.  
 TITLE Promoter region of mouse and human telomerase RNA component genes  
 JOURNAL Patent: JP 2002509699-A 44 02-APR-2002;  
 COMMENT OS Artificial Sequence  
 PN JP 2002509699-A/44  
 PD 02-APR-2002  
 PF 29-JAN-1999 JP 2000529424  
 PR 29-JAN-1998 GB 9801902.9  
 PI WILLIAM NICOL KEITH  
 PC C12N15/09, A61K31/7105, A61K31/711, A61K35/76, A61K38/00, A61K45/00, PC  
 A61K48/00,  
 PC A61P35/00, C12N1/15, C12N1/19, C12N1/21, C12N5/10, C12P21/02 PC  
 C12Q1/68/C12N9/12,  
 PC A61K35/76, A61K31:522, C12N15/00, A61K37/02, C12N5/00 CC  
 Description of Artificial Sequence: Oligonucleotide FH Key  
 Location/Qualifiers  
 FT source 1..25  
 FT /organism='Artificial Sequence'.  
 FT Location/Qualifiers  
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 /organism='synthetic construct'  
 /mol\_type='genomic DNA'  
 /db\_xref='taxon:32630'

Query Match 5.1%; Score 23; DB 1; Length 25;  
 Best Local Similarity 100.0%; Pred. No. 87;  
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GGGTTGCGGAGGGTGGGCTGGG 23  
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 Db 3 GGGTTGCGGAGGGTGGGCTGGG 25

RESULT 131  
 AX019590  
 LOCUS 25 bp DNA linear PAT 07-SEP-2000  
 DEFINITION Sequence 44 from Patent WO938964.  
 ACCESSION AX019590  
 VERSION AX019590.1 GI:10043504  
 KEYWORDS synthetic construct  
 SOURCE other sequences; artificial sequences.  
 ORGANISM synthetic construct  
 REFERENCE 1  
 AUTHORS Keith, W.N.  
 TITLE Promoter regions of the mouse and human telomerase rna component  
 JOURNAL genes  
 KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)  
 PATENT: WO 938964-A 44 05-AUG-1999;  
 Location/Qualifiers  
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 /organism='synthetic construct'  
 /mol\_type='unassigned DNA'  
 /db\_xref='taxon:32630'  
 /note='Oligonucleotide'

Query Match 5.1%; Score 23; DB 1; Length 25;  
 Best Local Similarity 100.0%; Pred. No. 87;  
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GGGTTGCGGAGGGTGGGCTGGG 23  
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 Db 3 GGGTTGCGGAGGGTGGGCTGGG 25

RESULT 132  
 AR016064/c  
 LOCUS 22 bp DNA linear PAT 05-DEC-1998  
 DEFINITION Sequence 32 from patent US 5776679.  
 ACCESSION AR016064  
 VERSION AR016064.1 GI:3972341  
 KEYWORDS Unknown.  
 SOURCE Unknown.  
 ORGANISM Unclassified.  
 REFERENCE 1 (bases 1 to 22)  
 AUTHORS Villeponteau, B., Feng, J., Funk, W., and Andrews, W.H.  
 TITLE Assays for the DNA component of human telomerase  
 JOURNAL Patent: US 5776679-A 32 07-JUL-1998;  
 FEATURES Location/Qualifiers  
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 /organism='unknown'  
 /mol\_type='unassigned DNA'

Query Match 4.9%; Score 22; DB 1; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 90;  
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 183 CTGCTGGCCCGTTGGCCCTCC 204  
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 Db 22 CTGCTGGCCCGTTGGCCCTCC 1

RESULT 133  
 AR059220/c  
 LOCUS 22 bp DNA linear PAT 29-SEP-1999  
 DEFINITION Sequence 27 from patent US 5837857.

ACCESSION AR059220  
VERSION AR059220.1 GI:5984797  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 22)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5837857-A 27 17-NOV-1998;  
FEATURES Location/Qualifiers  
source 1..22  
/organism="unknown"  
/mol\_type="unassigned DNA"  
Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 90;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 46 CTAACCCCTAACTGAGAAGGGCG 67  
Db 22 CTAACCCCTAACTGAGAAGGGCG 1  
RESULT 134  
LOCUS AR059221/c  
DEFINITION Sequence 28 from patent US 5837857.  
ACCESSION AR059221  
VERSION AR059221.1 GI:5984798  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 22)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5837857-A 28 17-NOV-1998;  
FEATURES Location/Qualifiers  
source 1..22  
/organism="unknown"  
/mol\_type="unassigned DNA"  
Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 90;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 54 AACTGAGAGGGCGTAGCGGCC 75  
Db 22 AACTGAGAGGGCGTAGCGGCC 1  
RESULT 135  
LOCUS AR075540/c  
DEFINITION Sequence 37 from patent US 5958680.  
ACCESSION AR075540  
VERSION AR075540.1 GI:10002286  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 22)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5958680-A 37 28-SEP-1999;  
FEATURES Location/Qualifiers  
source 1..22  
/organism="unknown"  
/mol\_type="unassigned DNA"  
Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 90;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 54 AACTGAGAGGGCGTAGCGGCC 75  
Db 22 AACTGAGAGGGCGTAGCGGCC 1  
RESULT 136  
LOCUS AR075545/c  
DEFINITION Sequence 42 from patent US 5958680.  
ACCESSION AR075545  
VERSION AR075545.1 GI:10002291  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 22)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5958680-A 42 28-SEP-1999;  
FEATURES Location/Qualifiers  
source 1..22  
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/mol\_type="unassigned DNA"  
Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 90;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 46 CTAACCCCTAACTGAGAAGGGCG 67  
Db 22 CTAACCCCTAACTGAGAAGGGCG 1  
RESULT 137  
LOCUS AR075546/c  
DEFINITION Sequence 43 from patent US 5958680.  
ACCESSION AR075546  
VERSION AR075546.1 GI:10002292  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 22)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5958680-A 43 28-SEP-1999;  
FEATURES Location/Qualifiers  
source 1..22  
/organism="unknown"  
/mol\_type="unassigned DNA"  
Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 90;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 54 AACTGAGAGGGCGTAGCGGCC 75  
Db 22 AACTGAGAGGGCGTAGCGGCC 1  
RESULT 138  
LOCUS BD176150/c  
DEFINITION Mammalian telomerase.  
ACCESSION BD176150  
VERSION BD176150.1 GI:29121854  
KEYWORDS JP 2002272489-A/9.  
SOURCE unidentified  
ORGANISM unclassified.

Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 183 CTGCTGGCCCGTTGCGCCCTCC 204  
Db 22 CTGCTGGCCCGTTGCGCCCTCC 1  
RESULT 136  
LOCUS AR075545/c  
DEFINITION Sequence 42 from patent US 5958680.  
ACCESSION AR075545  
VERSION AR075545.1 GI:10002291  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 22)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5958680-A 42 28-SEP-1999;  
FEATURES Location/Qualifiers  
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/organism="unknown"  
/mol\_type="unassigned DNA"  
Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 90;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 46 CTAACCCCTAACTGAGAAGGGCG 67  
Db 22 CTAACCCCTAACTGAGAAGGGCG 1  
RESULT 137  
LOCUS AR075546/c  
DEFINITION Sequence 43 from patent US 5958680.  
ACCESSION AR075546  
VERSION AR075546.1 GI:10002292  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 22)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5958680-A 43 28-SEP-1999;  
FEATURES Location/Qualifiers  
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/mol\_type="unassigned DNA"  
Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 90;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 54 AACTGAGAGGGCGTAGCGGCC 75  
Db 22 AACTGAGAGGGCGTAGCGGCC 1  
RESULT 138  
LOCUS BD176150/c  
DEFINITION Mammalian telomerase.  
ACCESSION BD176150  
VERSION BD176150.1 GI:29121854  
KEYWORDS JP 2002272489-A/9.  
SOURCE unidentified  
ORGANISM unclassified.

REFERENCE 1 (bases 1 to 22)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: JP 2002272489-A 9 24-SEP-2002;  
GERON CORP

COMMENT OS Unidentified  
PN JP 2002272489-A/9  
PD 24-SEP-2002  
PF 06-MAR-2002 JP 2002061125 08/272102,27-OCT-1994 US 08/330123 PR  
PR 07-JUL-1994 US 08/472802,07-JUN-1995 US 08/482115 PI BRYANT  
07-JUN-1995 US 08/472802,07-JUN-1995 US 08/482115 PI BRYANT  
VILLEPONTEAU,JUNLI FENG,WALTER FUNK,WILLIAM H ANDREWS PC  
C12N15/09,C12N9/99,C12Q1/68,G01N33/53,G01N33/566,C12N15/00 CC  
Strandedness: Single;  
CC Topology: Linear;  
CC Mammalian telomerase  
FH Key Location/Qualifiers  
FT source 1..22 /organism='Unidentified'.  
FT /db\_xref='taxon:32644'

FEATURES source  
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/organism='unidentified'  
/mol\_type='genomic DNA'  
/db\_xref='taxon:32644'

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 90;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAACTGAGAGGGCG 67  
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Db 22 CTAACCCCTAACTGAGAGGGCG 1

RESULT 139  
BD176151/c  
LOCUS BD176151  
DEFINITION Mammalian telomerase.  
ACCESSION BD176151  
VERSION BD176151.1 GI:29121855  
KEYWORDS JP 2002272489-A/10.  
SOURCE unidentified  
ORGANISM unclassified.

REFERENCE 1 (bases 1 to 22)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: JP 2002272489-A 10 24-SEP-2002;  
GERON CORP

COMMENT OS Unidentified  
PN JP 2002272489-A/10  
PD 24-SEP-2002  
PF 06-MAR-2002 JP 2002061125 08/272102,27-OCT-1994 US 08/330123 PR  
PR 07-JUL-1994 US 08/472802,07-JUN-1995 US 08/482115 PI BRYANT  
07-JUN-1995 US 08/472802,07-JUN-1995 US 08/482115 PI BRYANT  
VILLEPONTEAU,JUNLI FENG,WALTER FUNK,WILLIAM H ANDREWS PC  
C12N15/09,C12N9/99,C12Q1/68,G01N33/53,G01N33/566,C12N15/00 CC  
Strandedness: Single;  
CC Topology: Linear;  
CC Mammalian telomerase  
FH Key Location/Qualifiers  
FT source 1..22 /organism='Unidentified'.  
FT /db\_xref='taxon:32644'

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/organism='unidentified'  
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/db\_xref='taxon:32644'

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 90;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAACTGAGAGGGCG 67  
|||||  
Db 22 CTAACCCCTAACTGAGAGGGCG 1

RESULT 141  
BD176152/c  
LOCUS BD176152  
DEFINITION Sequence 5 from patent US 5583016.  
ACCESSION I31752  
VERSION I31752.1 GI:1822543  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 22)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5583016-A 5 10-DEC-1996;  
FEATURES Location/Qualifiers  
source 1..22  
/organism='unknown'  
/mol\_type='unassigned DNA'

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 90;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAACTGAGAGGGCG 67

QY 54 AACTGAGAGGGCGTAGGGCC 75  
|||||  
Db 22 AACTGAGAGGGCGTAGGGCC 1

RESULT 140  
BD176173/c  
LOCUS BD176173  
DEFINITION Mammalian telomerase.  
ACCESSION BD176173  
VERSION BD176173.1 GI:29121879  
KEYWORDS JP 2002272489-A/32.  
SOURCE unidentified  
ORGANISM unclassified.

REFERENCE 1 (bases 1 to 22)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: JP 2002272489-A 32 24-SEP-2002;  
GERON CORP

COMMENT OS Unidentified  
PN JP 2002272489-A/32  
PD 24-SEP-2002  
PF 06-MAR-2002 JP 2002061125 08/272102,27-OCT-1994 US 08/330123 PR  
PR 07-JUL-1994 US 08/472802,07-JUN-1995 US 08/482115 PI BRYANT  
07-JUN-1995 US 08/472802,07-JUN-1995 US 08/482115 PI BRYANT  
VILLEPONTEAU,JUNLI FENG,WALTER FUNK,WILLIAM H ANDREWS PC  
C12N15/09,C12N9/99,C12Q1/68,G01N33/53,G01N33/566,C12N15/00 CC  
Strandedness: Single;  
CC Topology: Linear;  
CC Mammalian telomerase  
FH Key Location/Qualifiers  
FT source 1..22 /organism='Unidentified'.  
FT /db\_xref='taxon:32644'

FEATURES source  
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/organism='unidentified'  
/mol\_type='genomic DNA'  
/db\_xref='taxon:32644'

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 90;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 183 CTGCTGGCCCGTTCCGCCCTCC 204  
|||||  
Db 22 CTGCTGGCCCGTTCCGCCCTCC 1

RESULT 141  
BD176175/c  
LOCUS I31752  
DEFINITION Sequence 5 from patent US 5583016.  
ACCESSION I31752  
VERSION I31752.1 GI:1822543  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 22)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5583016-A 5 10-DEC-1996;  
FEATURES Location/Qualifiers  
source 1..22  
/organism='unknown'  
/mol\_type='unassigned DNA'

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 90;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAACTGAGAGGGCG 67

Db 22 CTAACCCCTAACTGAGAGGGCG 1  
|||||  
RESULT 142  
I31753/c 22 bp DNA linear PAT 06-FEB-1997  
LOCUS I31753  
DEFINITION Sequence 6 from patent US 5583016.  
ACCESSION I31753  
VERSION I31753.1 GI:1822544  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 22)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5583016-A 6 10-DEC-1996;  
FEATURES Location/Qualifiers  
source 1..22  
/organism="unknown"  
/mol\_type="unassigned DNA"  
Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 90;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 54 AACTGAGAAGGGCGTAGGGCGC 75  
|||||  
Db 22 AACTGAGAAGGGCGTAGGGCGC 1  
|||||  
RESULT 143  
AR279617/c 22 bp DNA linear PAT 10-APR-2003  
LOCUS AR279617  
DEFINITION Sequence 2 from patent US 6517834.  
ACCESSION AR279617  
VERSION AR279617.1 GI:29714511  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 22)  
AUTHORS Weinrich,S.L., Atkinson,E.M. III, Lichtsteiner,S.P., Vasserot,A.P.  
TITLE Purified telomerase  
JOURNAL Patent: US 6517834-A 2 11-FEB-2003;  
FEATURES Location/Qualifiers  
source 1..22  
/organism="unknown"  
/mol\_type="genomic DNA"  
Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 90;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 46 CTAACCCCTAACTGAGAGGGCG 67  
|||||  
Db 22 CTAACCCCTAACTGAGAGGGCG 1  
|||||  
RESULT 144  
AR305068/c 22 bp DNA linear PAT 12-JUN-2003  
LOCUS AR305068  
DEFINITION Sequence 2 from patent US 6545133.  
ACCESSION AR305068  
VERSION AR305068.1 GI:31694375  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 22)  
AUTHORS Weinrich,S.L., Atkinson,E.M. III, Lichtsteiner,S.P., Vasserot,A.P.

and Pruzan,R.A.  
Methods for purifying telomerase  
Patent: US 6545133-A 2 08-APR-2003;  
FEATURES Location/Qualifiers  
source 1..22  
/organism="unknown"  
/mol\_type="genomic DNA"  
Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 90;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 46 CTAACCCCTAACTGAGAGGGCG 67  
|||||  
Db 22 CTAACCCCTAACTGAGAGGGCG 1  
|||||  
RESULT 145  
AR306489/c 22 bp RNA linear PAT 12-JUN-2003  
LOCUS AR306489  
DEFINITION Sequence 41 from patent US 6548298.  
ACCESSION AR306489  
VERSION AR306489.1 GI:31696328  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 22)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 6548298-A 41 15-APR-2003;  
FEATURES Location/Qualifiers  
source 1..22  
/organism="unknown"  
/mol\_type="unassigned RNA"  
Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 90;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 46 CTAACCCCTAACTGAGAGGGCG 67  
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Db 22 CTAACCCCTAACTGAGAGGGCG 1  
|||||  
RESULT 146  
AR306490/c 22 bp RNA linear PAT 12-JUN-2003  
LOCUS AR306490  
DEFINITION Sequence 42 from patent US 6548298.  
ACCESSION AR306490  
VERSION AR306490.1 GI:31696329  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 22)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 6548298-A 42 15-APR-2003;  
FEATURES Location/Qualifiers  
source 1..22  
/organism="unknown"  
/mol\_type="unassigned RNA"  
Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 90;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 54 AACTGAGAAGGGCGTAGGGCGC 75  
|||||  
Db 22 AACTGAGAAGGGCGTAGGGCGC 1  
|||||

RESULT 147  
AR016057/c  
LOCUS AR016057 21 bp DNA linear PAT 05-DEC-1998  
DEFINITION Sequence 25 from patent US 5776679.  
ACCESSION AR016057  
VERSION AR016057.1 GI:3972334  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 21)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Assays for the DNA component of human telomerase  
JOURNAL Patent: US 5776679-A 25 07-JUL-1998;  
FEATURES Location/Qualifiers  
source 1..21  
/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 184 TGCTGGCCCGTTGCGCCCTCC 204  
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Db 21 TGCTGGCCCGTTGCGCCCTCC 1

RESULT 148  
AR059218/c  
LOCUS AR059218 21 bp DNA linear PAT 29-SEP-1999  
DEFINITION Sequence 25 from patent US 5837857.  
ACCESSION AR059218  
VERSION AR059218.1 GI:5984795  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 21)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5837857-A 25 17-NOV-1998;  
FEATURES Location/Qualifiers  
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/mol\_type="unassigned DNA"

Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 184 TGCTGGCCCGTTGCGCCCTCC 204  
|||||  
Db 21 TGCTGGCCCGTTGCGCCCTCC 1

RESULT 149  
AR075529/c  
LOCUS AR075529 21 bp DNA linear PAT 30-AUG-2000  
DEFINITION Sequence 26 from patent US 5958680.  
ACCESSION AR075529  
VERSION AR075529.1 GI:10002277  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 21)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5958680-A 26 28-SEP-1999;  
FEATURES Location/Qualifiers  
source 1..21  
/organism="unknown"

/mol\_type="unassigned DNA"

Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 184 TGCTGGCCCGTTGCGCCCTCC 204  
|||||  
Db 21 TGCTGGCCCGTTGCGCCCTCC 1

RESULT 150  
AR161927/c  
LOCUS AR161927 21 bp DNA linear PAT 17-OCT-2001  
DEFINITION Sequence 25 from patent US 6258535.  
ACCESSION AR161927  
VERSION AR161927.1 GI:16228955  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 21)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 6258535-A 25 10-JUL-2001;  
FEATURES Location/Qualifiers  
source 1..21  
/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 184 TGCTGGCCCGTTGCGCCCTCC 204  
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Db 21 TGCTGGCCCGTTGCGCCCTCC 1

RESULT 151  
BD176168/c  
LOCUS BD176168 21 bp DNA linear PAT 18-MAR-2003  
DEFINITION Mammalian telomerase.  
ACCESSION BD176168  
VERSION BD176168.1 GI:29121874  
KEYWORDS JP 2002272489-A/27.  
SOURCE unidentified  
ORGANISM unidentified.  
REFERENCE 1 (bases 1 to 21)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: JP 2002272489-A 27 24-SEP-2002;  
COMMENT GERON CORP  
OS Unidentified  
PN JP 2002272489-A/27  
PD 24-SEP-2002  
PF 06-MAR-2002 JP 2002061125  
PR 07-JUL-1994 US 08/272102,27-OCT-1994 US 08/330123 PR  
07-JUN-1995 US 08/472802,07-JUN-1995 US 08/482115 PI BRYANT  
VILLEPONTEAU,JUNLI FENG,WALTER FUNK,WILLIAM H ANDREWS PC  
C12N15/09,C12N9/99,C12Q1/68,G01N33/53,G01N33/566,C12N15/00 CC  
Strandedness: Single;  
CC Topology: Linear;  
CC Mammalian telomerase  
FH Key Location/Qualifiers  
FT source 1..21  
/organism='Unidentified'.  
/db\_xref="taxon:32644"

FEATURES  
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/mol\_type="genomic DNA"  
/db\_xref="taxon:32644"



Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 184 TGCTGGCCCGTTCGCCCTCC 204  
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Db 21 TGCTGGCCCGTTCGCCCTCC 1

RESULT 152  
I31772/c  
LOCUS I31772 21 bp DNA linear PAT 06-FEB-1997  
DEFINITION Sequence 25 from patent US 5583016.  
ACCESSION I31772  
VERSION I31772.1 GI:1822563  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 21)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 5583016-A 25 10-DEC-1996;  
FEATURES Location/Qualifiers  
source  
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/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 184 TGCTGGCCCGTTCGCCCTCC 204  
|||||  
Db 21 TGCTGGCCCGTTCGCCCTCC 1

RESULT 153  
AR306475/c  
LOCUS AR306475 21 bp DNA linear PAT 12-JUN-2003  
DEFINITION Sequence 25 from patent US 6548298.  
ACCESSION AR306475  
VERSION AR306475.1 GI:31696314  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 21)  
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.  
TITLE Mammalian telomerase  
JOURNAL Patent: US 6548298-A 25 15-APR-2003;  
FEATURES Location/Qualifiers  
source  
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/organism="unknown"  
/mol\_type="genomic DNA"

Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 184 TGCTGGCCCGTTCGCCCTCC 204  
|||||  
Db 21 TGCTGGCCCGTTCGCCCTCC 1

RESULT 154  
A84593/c  
LOCUS A84593 22 bp DNA linear PAT 21-JAN-2000  
DEFINITION Sequence 3 from Patent WO9845450.  
ACCESSION A84593  
VERSION A84593.1 GI:6733509  
KEYWORDS

SOURCE unidentified  
ORGANISM unidentified  
unclassified.

REFERENCE 1 (bases 1 to 22)  
AUTHORS Atkinson,E.M. and Kealey,J.T.  
TITLE PURIFIED TELOMERASE  
JOURNAL Patent: WO 9845450-A 3 15-OCT-1998;  
GERON CORP (US)  
FEATURES Location/Qualifiers  
source  
1..22  
/organism="unidentified"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32644"

modified\_base 1  
/note="N = BIOTINYLATED C"  
/mod\_base=OTHER

Query Match 4.7%; Score 21; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAAGGC 66  
|||||  
Db 22 CTAACCCCTAACTGAGAAGGC 2

RESULT 155  
AR079890/c  
LOCUS AR079890 22 bp DNA linear PAT 31-AUG-2000  
DEFINITION Sequence 3 from patent US 5968506.  
ACCESSION AR079890  
VERSION AR079890.1 GI:10006643  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 22)  
AUTHORS Weinrich,S.L., Atkinson,E.M. III, Lichtsteiner,S.P., Vasserot,A.P.,  
Pruzan,R.A. and Kealey,J.T.  
TITLE Purified telomerase  
JOURNAL Patent: US 5968506-A 3 19-OCT-1999;  
FEATURES Location/Qualifiers  
source  
1..22  
/organism="unknown"  
/mol\_type="unassigned DNA"

Query Match 4.7%; Score 21; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAAGGC 66  
|||||  
Db 22 CTAACCCCTAACTGAGAAGGC 2

RESULT 156  
BD058134/c  
LOCUS BD058134 22 bp DNA linear PAT 27-AUG-2002  
DEFINITION Purified telomerase.  
ACCESSION BD058134  
VERSION BD058134.1 GI:22603740  
KEYWORDS  
SOURCE Zea mays  
ORGANISM Zea mays  
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;  
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD  
clade; Panicoideae; Andropogoneae; Zea.  
REFERENCE 1 (bases 1 to 22)  
AUTHORS Weinrich,S.L., Iii,E.M.A., Lichtsteiner,S.P., Vasserot,A.P.,  
Pruzan,R.A. and Kealey,J.T.  
TITLE Purified telomerase  
JOURNAL Patent: JP 2001509681-A 3 24-JUL-2001;  
GERON CORP

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COMMENT      PN  JP 2001509681-A/3
PD 24-JUL-2001
PF 04-APR-1997 JP 1998542718
PI SCOTT L WEINRICH, EDWARD M ATKINSON III, SERGE P LICHTSTEINER,
PI ALAIN P VASSEROT, RONALD A PRUZAN, JAMES T KEALEY PC
C12N15/54, C12N9/12, C07K16/40, C12Q1/68, C07K14/47 CC Strandedness:
Single;
CC Topology: Linear;
CC /mod_base= OTHER;
CC /note= 'N = biotinylated C'
CC /note= 'oligonucleotide P3'
CC key Location/Qualifiers
FT modified base 1.
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/organism="Zea mays"
/mol_type="genomic DNA"
/db_xref="taxon:4577"
Query Match 4.7%; Score 21; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 46 CTAACCCCTAACTGAGAAGGC 66
| | | | | | | | | | | | | | | | | |
Db 22 CTAACCCCTAACTGAGAAGGC 2
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RESULT 157
A84604/c 20 bp DNA linear PAT 21-JAN-2000
LOCUS Sequence 14 from Patent WO9845450.
ACCESSION A84604
VERSION A84604.1 GI:6733517
KEYWORDS
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1 (bases 1 to 20)
AUTHORS Atkinson, E.M. and Kealey, J.T.
TITLE PURIFIED TELOMERASE
JOURNAL Patent: WO 9845450-A 14 15-OCT-1998;
GERON CORP (US)
FEATURES
source
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/organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 361 AGGCCGCGAGGAGGAGGACG 380
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Db 20 AGGCCGCGAGGAGGAGGACG 1
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RESULT 158
AR016039/c 20 bp DNA linear PAT 05-DEC-1998
LOCUS Sequence 7 from patent US 5776679.
DEFINITION AR016039
ACCESSION AR016039
VERSION AR016039.1 GI:3972316
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Villeponteau, B., Feng, J., Funk, W. and Andrews, W.H.
TITLE Assays for the DNA component of human telomerase
JOURNAL Patent: US 5776679-A 7 07-JUL-1998;
FEATURES
Location/Qualifiers
source
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/organism="unassigned DNA"
/mol_type="unassigned DNA"
Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 41 TTGTGCTAACCCCTAACTGAG 60
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Db 20 TTGTGCTAACCCCTAACTGAG 1
| | | | | | | | | | | | | | | | | |
RESULT 161
AR059222/c 20 bp DNA linear PAT 29-SEP-1999
LOCUS Sequence 29 from patent US 5837857.
DEFINITION AR059222
ACCESSION AR059222
VERSION AR059222.1 GI:5984777
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Villeponteau, B., Feng, J., Funk, W. and Andrews, W.H.
TITLE Mammalian telomerase
JOURNAL Patent: US 5837857-A 7 17-NOV-1998;
FEATURES
Location/Qualifiers
source
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/organism="unassigned DNA"
/mol_type="unassigned DNA"
Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2 GGTTCGGAGGGTGGGCCTG 21
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Db 20 GGTTCGGAGGGTGGGCCTG 1
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RESULT 159
AR059200/c 20 bp DNA linear PAT 29-SEP-1999
LOCUS Sequence 7 from patent US 5837857.
DEFINITION AR059200
ACCESSION AR059200
VERSION AR059200.1 GI:5984777
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Villeponteau, B., Feng, J., Funk, W. and Andrews, W.H.
TITLE Mammalian telomerase
JOURNAL Patent: US 5837857-A 7 17-NOV-1998;
FEATURES
Location/Qualifiers
source
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/organism="unassigned DNA"
/mol_type="unassigned DNA"
Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2 GGTTCGGAGGGTGGGCCTG 21
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Db 20 GGTTCGGAGGGTGGGCCTG 1
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RESULT 160
AR059219/c 20 bp DNA linear PAT 29-SEP-1999
LOCUS Sequence 26 from patent US 5837857.
DEFINITION AR059219
ACCESSION AR059219
VERSION AR059219.1 GI:5984796
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Villeponteau, B., Feng, J., Funk, W. and Andrews, W.H.
TITLE Mammalian telomerase
JOURNAL Patent: US 5837857-A 26 17-NOV-1998;
FEATURES
Location/Qualifiers
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/mol_type="unassigned DNA"
Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2 GGTTCGGAGGGTGGGCCTG 21
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Db 20 GGTTCGGAGGGTGGGCCTG 1
| | | | | | | | | | | | | | | | | |
RESULT 162
AR059222/c 20 bp DNA linear PAT 29-SEP-1999
LOCUS Sequence 29 from patent US 5837857.
DEFINITION AR059222
ACCESSION AR059222
VERSION AR059222.1 GI:5984777
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Villeponteau, B., Feng, J., Funk, W. and Andrews, W.H.
TITLE Mammalian telomerase
JOURNAL Patent: US 5837857-A 7 17-NOV-1998;
FEATURES
Location/Qualifiers
source
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/organism="unassigned DNA"
/mol_type="unassigned DNA"
Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 41 TTGTGCTAACCCCTAACTGAG 60
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Db 20 TTGTGCTAACCCCTAACTGAG 1
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RESULT 163
AR059222/c 20 bp DNA linear PAT 29-SEP-1999
LOCUS Sequence 29 from patent US 5837857.
DEFINITION AR059222
ACCESSION AR059222
VERSION AR059222.1 GI:5984777
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Villeponteau, B., Feng, J., Funk, W. and Andrews, W.H.
TITLE Assays for the DNA component of human telomerase
JOURNAL Patent: US 5776679-A 7 07-JUL-1998;
FEATURES
Location/Qualifiers
source
1..20
/organism="unassigned DNA"
/mol_type="unassigned DNA"
Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 41 TTGTGCTAACCCCTAACTGAG 60
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Db 20 TTGTGCTAACCCCTAACTGAG 1
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ACCESSION AR059222
VERSION AR059222.1 GI:5984799
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE Mammalian telomerase
JOURNAL Patent: US 5837857-A 29 17-NOV-1998;
FEATURES Location/Qualifiers
source 1..20
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GGTTCGGAGGCTGGCCTG 21
|||||
Db 20 GGTTCGGAGGCTGGCCTG 1

RESULT 162
AR063827/c
LOCUS AR063827 20 bp DNA linear PAT 29-SEP-1999
DEFINITION Sequence 3 from patent US 5846723.
ACCESSION AR063827
VERSION AR063827.1 GI:5993135
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Kim,N.Woo., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.
TITLE Methods for detecting the RNA component of telomerase
JOURNAL Patent: US 5846723-A 3 08-DEC-1998;
FEATURES Location/Qualifiers
source 1..20
/organism="unknown"
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Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 361 AGGCCGCGAGGAGGAACG 380
|||||
Db 20 AGGCCGCGAGGAGGAACG 1

RESULT 163
AR063830/c
LOCUS AR063830 20 bp DNA linear PAT 29-SEP-1999
DEFINITION Sequence 6 from patent US 5846723.
ACCESSION AR063830
VERSION AR063830.1 GI:5993138
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Kim,N.Woo., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.
TITLE Methods for detecting the RNA component of telomerase
JOURNAL Patent: US 5846723-A 6 08-DEC-1998;
FEATURES Location/Qualifiers
source 1..20
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 361 AGGCCGCGAGGAGGAACG 380
|||||
Db 20 AGGCCGCGAGGAGGAACG 1

RESULT 164
AR063831/c
LOCUS AR063831 20 bp DNA linear PAT 29-SEP-1999
DEFINITION Sequence 7 from patent US 5846723.
ACCESSION AR063831
VERSION AR063831.1 GI:5993139
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Kim,N.Woo., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.
TITLE Methods for detecting the RNA component of telomerase
JOURNAL Patent: US 5846723-A 7 08-DEC-1998;
FEATURES Location/Qualifiers
source 1..20
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 290 CTGCCACCGCGAAGAGTTGG 309
|||||
Db 20 CTGCCACCGCGAAGAGTTGG 1

RESULT 165
AR063837/c
LOCUS AR063837 20 bp DNA linear PAT 29-SEP-1999
DEFINITION Sequence 13 from patent US 5846723.
ACCESSION AR063837
VERSION AR063837.1 GI:5993145
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Kim,N.Woo., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.
TITLE Methods for detecting the RNA component of telomerase
JOURNAL Patent: US 5846723-A 13 08-DEC-1998;
FEATURES Location/Qualifiers
source 1..20
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 159 TCTAGAGCAACAAAAATG 178
|||||
Db 20 TCTAGAGCAACAAAAATG 1

RESULT 166
AR075511/c
LOCUS AR075511 20 bp DNA linear PAT 30-AUG-2000
DEFINITION Sequence 8 from patent US 5958680.
ACCESSION AR075511
VERSION AR075511.1 GI:10002261
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
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REFERENCE 1 (bases 1 to 20)
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE Mammalian telomerase
JOURNAL Patent: US 5958680-A 8 28-SEP-1999;
FEATURES
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            /organism="unknown"
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Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GGTTCGGAGGTGGGCGCTG 21
    |||||
Db 20 GGTTCGGAGGTGGGCGCTG 1

RESULT 167
AR075544/c
LOCUS AR075544 20 bp DNA linear PAT 30-AUG-2000
DEFINITION Sequence 41 from patent US 5958680.
ACCESSION AR075544
VERSION AR075544.1 GI:10002290
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE Mammalian telomerase
JOURNAL Patent: US 5958680-A 41 28-SEP-1999;
FEATURES
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        Location/Qualifiers
            1..20
            /organism="unknown"
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Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 41 TTGTCTAACCTTAAGTGAACG 60
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Db 20 TTGTCTAACCTTAAGTGAACG 1

RESULT 168
AR079894/c
LOCUS AR079894 20 bp DNA linear PAT 31-AUG-2000
DEFINITION Sequence 7 from patent US 5968506.
ACCESSION AR079894
VERSION AR079894.1 GI:10006647
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Weinrich,S.L., Atkinson,E.M. III, Lichtsteiner,S.P., Vasserot,A.P.,
Pruzan,R.A. and Kealey,J.T.
TITLE Purified telomerase
JOURNAL Patent: US 5968506-A 7 19-OCT-1999;
FEATURES
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        Location/Qualifiers
            1..20
            /organism="unknown"
            /mol_type="unassigned DNA"
Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 361 AGGCCGAGGAAGGAACG 380
    |||||
Db 20 AGGCCGAGGAAGGAACG 1

RESULT 169
AR161909/c
LOCUS AR161909 20 bp DNA linear PAT 17-OCT-2001
DEFINITION Sequence 7 from patent US 6258535.
ACCESSION AR161909
VERSION AR161909.1 GI:16228923
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE Mammalian telomerase
JOURNAL Patent: US 6258535-A 7 10-JUL-2001;
FEATURES
    source
        Location/Qualifiers
            1..20
            /organism="unknown"
            /mol_type="unassigned DNA"
Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GGTTCGGAGGTGGGCGCTG 21
    |||||
Db 20 GGTTCGGAGGTGGGCGCTG 1

RESULT 170
BD176149/c
LOCUS BD176149 20 bp DNA linear PAT 18-MAR-2003
DEFINITION Mammalian telomerase.
ACCESSION BD176149
VERSION BD176149.1 GI:29121853
KEYWORDS
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1 (bases 1 to 20)
AUTHORS Villeponteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE Mammalian telomerase
JOURNAL Patent: JP 2002272489-A 8 24-SEP-2002;
COMMENT
    OS Unidentified
    EN JP 2002272489-A/8
    ED 24-SEP-2002
    PF 06-MAR-2002 JP 2002061125
    PR 07-JUL-1994 US 08/272102,27-OCT-1994 US 08/330123 PR
    07-JUN-1995 US 08/472802,07-JUN-1995 US 08/482115 PI BRYANT
    VILLEPONTEAU,JUNLI FENG,WALTER FUNK,WILLIAM H ANDREWS PC
    C12N15/09,C12N9/99,C12Q1/68,G01N33/53,G01N33/566,C12N15/00 CC
    Strandedness: Single;
    CC Topology: Linear;
    CC Mammalian telomerase
    FH Key Location/Qualifiers
    FT source 1..20
    /organism='Unidentified'.
FEATURES
    source
        Location/Qualifiers
            1..20
            /organism="unidentified"
            /mol_type="genomic DNA"
            /db_xref="taxon:32644"
Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 41 TTGTCTAACCTTAAGTGAACG 60
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Db 20 TTGTCTAACCTTAAGTGAACG 1
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[illegible]

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Unclassified.
1 (bases 1 to 20)
Villemonteau,B., Feng,J., Funk,W. and Andrews,W.H.
Mammalian telomerase
Patent: US 5583016-A 4 10-DEC-1996;
Location/Qualifiers
1..20
/organism="unknown"
/mol_type="unassigned DNA"

Query Match      4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 41 TTTGTCTAACCCCTAACTGAG 60
|||||
Db 20 TTTGTCTAACCCCTAACTGAG 1

RESULT 175
I31754/c
LOCUS      I31754      20 bp      DNA      linear      PAT 06-FEB-1997
DEFINITION Sequence 7 from patent US 5583016.
ACCESSION  I31754
VERSION     I31754.1 GI:1822545
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unclassified.
REFERENCE  1 (bases 1 to 20)
AUTHORS   Villemonteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE     Mammalian telomerase
JOURNAL   Patent: US 5583016-A 7 10-DEC-1996;
FEATURES   Location/Qualifiers
            1..20
            /organism="unknown"
            /mol_type="unassigned DNA"

Query Match      4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 41 TTTGTCTAACCCCTAACTGAG 60
|||||
Db 20 TTTGTCTAACCCCTAACTGAG 1

RESULT 176
AR306459/c
LOCUS      AR306459      20 bp      DNA      linear      PAT 12-JUN-2003
DEFINITION Sequence 7 from patent US 6548298.
ACCESSION  AR306459
VERSION     AR306459.1 GI:31696298
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unclassified.
REFERENCE  1 (bases 1 to 20)
AUTHORS   Villemonteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE     Mammalian telomerase
JOURNAL   Patent: US 6548298-A 7 15-APR-2003;
FEATURES   Location/Qualifiers
            1..20
            /organism="unknown"
            /mol_type="genomic DNA"

Query Match      4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GGTTCGGAGGGTGGGCCTG 21
|||||
Db 20 GGTTCGGAGGGTGGGCCTG 1

RESULT 176
AR306459/c
LOCUS      AR306459      20 bp      DNA      linear      PAT 12-JUN-2003
DEFINITION Sequence 7 from patent US 6548298.
ACCESSION  AR306459
VERSION     AR306459.1 GI:31696298
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unclassified.
REFERENCE  1 (bases 1 to 20)
AUTHORS   Villemonteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE     Mammalian telomerase
JOURNAL   Patent: US 6548298-A 7 15-APR-2003;
FEATURES   Location/Qualifiers
            1..20
            /organism="unknown"
            /mol_type="genomic DNA"

Query Match      4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GGTTCGGAGGGTGGGCCTG 21
|||||
Db 20 GGTTCGGAGGGTGGGCCTG 1

RESULT 177
AR306488/c
LOCUS      AR306488      20 bp      RNA      linear      PAT 12-JUN-2003
DEFINITION Sequence 40 from patent US 6548298.
ACCESSION  AR306488
VERSION     AR306488.1 GI:31696327
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unclassified.
REFERENCE  1 (bases 1 to 20)
AUTHORS   Villemonteau,B., Feng,J., Funk,W. and Andrews,W.H.
TITLE     Mammalian telomerase
JOURNAL   Patent: US 6548298-A 40 15-APR-2003;
FEATURES   Location/Qualifiers
            1..20
            /organism="unknown"
            /mol_type="unassigned RNA"

Query Match      4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 41 TTTGTCTAACCCCTAACTGAG 60
|||||
Db 20 TTTGTCTAACCCCTAACTGAG 1

RESULT 178
AX019561
LOCUS      AX019561      20 bp      DNA      linear      PAT 07-SEP-2000
DEFINITION Sequence 15 from Patent WO9938964.
ACCESSION  AX019561
VERSION     AX019561.1 GI:10043475
KEYWORDS   .
SOURCE     synthetic construct
            synthetic construct
            other sequences; artificial sequences.
ORGANISM   Keith,W.N.
REFERENCE  1
AUTHORS   Keith,W.N.
TITLE     Promoter regions of the mouse and human telomerase rna component
JOURNAL   Genes
            Patent: WO 9938964-A 15 05-AUG-1999;
            KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)
FEATURES   Location/Qualifiers
            1..20
            /organism="synthetic construct"
            /mol_type="unassigned DNA"
            /db_xref="taxon:32630"
            /note="primer"

Query Match      4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 410 CTGAGCTGTGGGACGTGCAC 429
|||||
Db 1 CTGAGCTGTGGGACGTGCAC 20

RESULT 179
AX019591
LOCUS      AX019591      20 bp      DNA      linear      PAT 07-SEP-2000
DEFINITION Sequence 45 from Patent WO9938964.
ACCESSION  AX019591
VERSION     AX019591.1 GI:10043505
KEYWORDS   .
SOURCE     synthetic construct
            synthetic construct
            other sequences; artificial sequences.
ORGANISM   Keith,W.N.
REFERENCE  1
```

AUTHORS Keith.W.N.  
TITLE Promoter regions of the mouse and human telomerase rna component  
JOURNAL genes  
PATENT: WO 9938964-A 45 05-AUG-1999;  
KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)  
FEATURES Location/Qualifiers  
source 1..20  
/organism="synthetic construct"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32630"  
/note="Oligonucleotide"

Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.1e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 17 GCCTGGGAGGGTGTGGCC 36  
|||||  
Db 1 GCCTGGGAGGGTGTGGCC 20  
|||||

RESULT 180  
AX058271 20 bp DNA linear PAT 17-JAN-2001  
LOCUS Sequence 6 from Patent WO0074667.  
DEFINITION AX058271  
ACCESSION AX058271.1 GI:12310770  
VERSION  
KEYWORDS synthetic construct  
SOURCE synthetic construct  
ORGANISM other sequences; artificial sequences.

REFERENCE 1  
Au,J.L. and Wientjes,G.  
AUTHORS Compositions active in telomere damage comprising a taxane and  
TITLE telomerase inhibitor  
JOURNAL Patent: WO 0074667-A 6 14-DEC-2000;  
Au, Jessie L.S. (US) ; Wientjes, Guillaume (US)  
FEATURES Location/Qualifiers  
source 1..20  
/organism="synthetic construct"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32630"  
/note="primer/probe"

Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.1e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GGGTTGCGAGGGTGGGCCT 20  
|||||  
Db 1 GGGTTGCGAGGGTGGGCCT 20  
|||||

RESULT 181  
BD023699/c 20 bp DNA linear PAT 27-AUG-2002  
LOCUS Method for detecting and inhibiting RNA component of telomerase.  
DEFINITION BD023699  
ACCESSION BD023699  
VERSION BD023699.1 GI:22564922  
KEYWORDS JP 2001507229-A/3.  
SOURCE unidentified  
ORGANISM unclassified.

REFERENCE 1 (bases 1 to 20)  
AUTHORS Kim,N.W., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.  
TITLE Method for detecting and inhibiting RNA component of telomerase  
JOURNAL Patent: JP 2001507229-A 3 05-JUN-2001;  
GERON CORP  
COMMENT PN JP 2001507229-A/3  
PD 05-JUN-2001  
PF 19-DEC-1997 JP 1998529003  
PR 20-DEC-1996 US 08/770564, 20-DEC-1996 US 08/770565 PI  
NAM WOO KIM, FRED WU, JAMES T KEALEY, RONALD PRUZAN, SCOTT L PI

WEINRICH  
PC C12N15/09,A61K9/08,A61K31/7105,A61K45/00,A61K48/00,A61P35/00,  
PC C12N5/10,  
PC C12N9/12,C12Q1/68,C12Q1/68.C12N15/00.C12N5/00 CC  
Strandedness: Single;  
CC Topology: Linear;  
CC /note= 'Oligo 14ab'  
FH Key Location/Qualifiers.  
source 1..20  
/organism="unidentified"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32644"

Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.1e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 361 AGGCCGCGAGGAGGACG 380  
|||||  
Db 20 AGGCCGCGAGGAGGACG 1  
|||||

RESULT 182  
BD023702/c 20 bp DNA linear PAT 27-AUG-2002  
LOCUS Method for detecting and inhibiting RNA component of telomerase.  
DEFINITION BD023702  
ACCESSION BD023702  
VERSION BD023702.1 GI:22564925  
KEYWORDS JP 2001507229-A/6.  
SOURCE unidentified  
ORGANISM unclassified.

REFERENCE 1 (bases 1 to 20)  
AUTHORS Kim,N.W., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.  
TITLE Method for detecting and inhibiting RNA component of telomerase  
JOURNAL Patent: JP 2001507229-A 6 05-JUN-2001;  
GERON CORP  
COMMENT PN JP 2001507229-A/6  
PD 05-JUN-2001  
PF 19-DEC-1997 JP 1998529003  
PR 20-DEC-1996 US 08/770564, 20-DEC-1996 US 08/770565 PI  
NAM WOO KIM, FRED WU, JAMES T KEALEY, RONALD PRUZAN, SCOTT L PI  
WEINRICH  
PC C12N15/09,A61K9/08,A61K31/7105,A61K45/00,A61K48/00,A61P35/00,  
PC C12N5/10,  
PC C12N9/12,C12Q1/68,C12Q1/68.C12N15/00.C12N5/00 CC  
Strandedness: Single;  
CC Topology: Linear;  
CC /note= 'Oligo 16ab'  
FH Key Location/Qualifiers.  
source 1..20  
/organism="unidentified"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32644"

Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.1e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 300 GAAGAGTTGGGCTCTGTCTCAG 319  
|||||  
Db 20 GAAGAGTTGGGCTCTGTCTCAG 1  
|||||

RESULT 183  
BD023703/c 20 bp DNA linear PAT 27-AUG-2002  
LOCUS Method for detecting and inhibiting RNA component of telomerase.  
DEFINITION BD023703  
ACCESSION BD023703  
VERSION BD023703.1 GI:22564926  
KEYWORDS JP 2001507229-A/7.

SOURCE unidentified  
ORGANISM unclassified.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Kim,N.W., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.  
TITLE Method for detecting and inhibiting RNA component of telomerase  
JOURNAL Patent: JP 2001507229-A 7 05-JUN-2001;  
GERON CORP

COMMENT PN JP 2001507229-A/7  
PD 05-JUN-2001  
PF 19-DEC-1997 JP 1998529003  
PR 20-DEC-1996 US 08/770564,20-DEC-1996 US 08/770565 PI  
NAM WOO KIM,FRED WU,JAMES T KEALEY,RONALD PRUZAN,SCOTT L PI  
WEINRICH

PC C12N15/09,A61K9/08,A61K31/7105,A61K45/00,A61K48/00,A61P35/00,  
PC C12N5/10,  
PC C12N9/12,C12Q1/68,C12Q1/68,C12N15/00,C12N5/00 CC  
Strandedness: Single;  
CC Topology: Linear;  
CC /note= 'oligo 16bc'  
FH Key Location/Qualifiers.  
source 1..20  
/organism="unidentified"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32644"

Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.1e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 290 CTGCCACCGCAGAGTTGG 309  
|||||  
Db 20 CTGCCACCGCAGAGTTGG 1

RESULT 184  
BD023709/c  
LOCUS 20 bp DNA linear PAT 27-AUG-2002  
DEFINITION Method for detecting and inhibiting RNA component of telomerase.  
ACCESSION BD023709  
VERSION BD023709.1 GI:22564932  
KEYWORDS JP 2001507229-A/13.  
SOURCE unidentified  
ORGANISM unclassified.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Kim,N.W., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.  
TITLE Method for detecting and inhibiting RNA component of telomerase  
JOURNAL Patent: JP 2001507229-A 13 05-JUN-2001;  
GERON CORP

COMMENT PN JP 2001507229-A/13  
PD 05-JUN-2001  
PF 19-DEC-1997 JP 1998529003  
PR 20-DEC-1996 US 08/770564,20-DEC-1996 US 08/770565 PI  
NAM WOO KIM,FRED WU,JAMES T KEALEY,RONALD PRUZAN,SCOTT L PI  
WEINRICH

PC C12N15/09,A61K9/08,A61K31/7105,A61K45/00,A61K48/00,A61P35/00,  
PC C12N5/10,  
PC C12N9/12,C12Q1/68,C12Q1/68,C12N15/00,C12N5/00 CC  
Strandedness: Single;  
CC Topology: Linear;  
CC /note= 'oligo 20/21'  
FH Key Location/Qualifiers.  
source 1..20  
/organism="unidentified"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32644"

Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.1e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 159 TCTAGAGCAACCAAAAAATG 178  
|||||  
Db 20 TCTAGAGCAACCAAAAAATG 1

RESULT 185  
BD058142/c  
LOCUS 20 bp DNA linear PAT 27-AUG-2002  
DEFINITION Purified telomerase.  
ACCESSION BD058142  
VERSION BD058142.1 GI:22603748  
KEYWORDS JP 2001509681-A/11.  
SOURCE Zea mays  
ORGANISM Zea mays  
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;  
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD  
clade; Panicoideae; Andropogoneae; Zea.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Weinrich,S.L., Iii,E.M.A., Lichtsteiner,S.P., Vasserot,A.P.,  
Pruzan,R.A. and Kealey,J.T.  
TITLE Purified telomerase  
JOURNAL Patent: JP 2001509681-A 11 24-JUL-2001;  
GERON CORP  
COMMENT PN JP 2001509681-A/11  
PD 24-JUL-2001  
PF 04-APR-1997 JP 1998542718  
PI SCOTT L WEINRICH,EDWARD M ATKINSON III,SERGE P LICHTSTEINER,  
PI ALAIN P VASSEROT,RONALD A PRUZAN,JAMES T KEALEY PC  
C12N15/54,C12N9/12,C07K16/40,C12Q1/68,C07K14/47 CC Strandedness:  
Single;  
CC Topology: Linear;  
CC /note= 'oligonucleotide 14ab'  
FH Key Location/Qualifiers.  
source 1..20  
/organism="Zea mays"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:4577"

Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.1e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 361 AGGCCCGCAGGAGGAGC 380  
|||||  
Db 20 AGGCCCGCAGGAGGAGC 1

RESULT 186  
BD071074/c  
LOCUS 20 bp DNA linear PAT 27-AUG-2002  
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.  
ACCESSION BD071074  
VERSION BD071074.1 GI:22616677  
KEYWORDS JP 2001517929-A/40.  
SOURCE unidentified  
ORGANISM unidentified  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Shay,J.W., Wright,W.E., Piatyszek,M.A., Corey,D. and Norton,J.C.  
TITLE Modulation of mammalian telomerase by peptide nucleic acids  
JOURNAL Patent: JP 2001517929-A 40 09-OCT-2001;  
GERON CORP

COMMENT OS Unidentified  
PN JP 2001517929-A/40  
PD 09-OCT-2001  
PF 09-APR-1997 JP 1997536487  
PR 09-APR-1996 US 08/630019  
PI JERRY W SHAY,WOODRING E WRIGHT,MIECZYSLAW A PIATYSZEK,DAVID  
PI COREY,  
PI JAMES C NORTON  
PC C07K14/00,A61K38/16,C12Q1/68



```

CC      Strandedness: Single;
CC      Topology: Linear;
CC      /desc = 'peptide nucleic acid (PNA), where (deoxy(ribose- CC
CC      phosphate
CC      linkages are replaced by N-(2-aminoethyl)glycine units linked
CC      to
CC      nucleotide bases via glycine amino N through a CC
methylene carbonyl linker'
FH      Key      Location/Qualifiers
FT      1..20
FT      Location/Qualifiers
FEATURES
source      1..20
              /organism="Unidentified".
              /organism="unidentified"
              /mol_type="genomic DNA"
              /db_xref="taxon:32644"

Query Match      4.2%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      46 CTAACCCCTAACTGAGAGGG 65
      |||||
Db      20 CTAACCCCTAACTGAGAGGG 1

RESULT 187
LOCUS      AR063833/c
DEFINITION      Sequence 9 from patent US 5846723.
ACCESSION      AR063833
VERSION      AR063833.1 GI:5993141
KEYWORDS      Unknown.
ORGANISM      Unknown.
REFERENCE      1 (bases 1 to 19)
AUTHORS      Kim,N.Woo., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.
TITLE      Methods for detecting the RNA component of telomerase
JOURNAL      Patent: US 5846723-A 9 08-DEC-1998;
FEATURES
source      1..19
              /organism="unknown"
              /mol_type="unassigned DNA"

Query Match      4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      148 CCACCGTTTCATTCTAGAGC 166
      |||||
Db      19 CCACCGTTTCATTCTAGAGC 1

RESULT 188
LOCUS      AR241175/c
DEFINITION      Sequence 2 from patent US 6468983.
ACCESSION      AR241175
VERSION      AR241175.1 GI:27286405
KEYWORDS      Unknown.
ORGANISM      Unknown.
REFERENCE      1 (bases 1 to 19)
AUTHORS      Silverman,R.H., Kondo,S., Cowell,J.K., Li,G. and Torrence,P.F.
TITLE      RNase L activators and antisense oligonucleotides effective to
JOURNAL      treat telomerase-expressing malignancies
FEATURES
source      1..19
              /organism="unknown"
              /mol_type="genomic DNA"

CC      Strandedness: Single;
CC      Topology: Linear;
CC      /desc = 'peptide nucleic acid (PNA), where (deoxy(ribose- CC
CC      phosphate
CC      linkages are replaced by N-(2-aminoethyl)glycine units linked
CC      to
CC      nucleotide bases via glycine amino N through a CC
methylene carbonyl linker'
FH      Key      Location/Qualifiers
FT      1..20
FT      Location/Qualifiers
FEATURES
source      1..20
              /organism="Unidentified".
              /organism="unidentified"
              /mol_type="genomic DNA"
              /db_xref="taxon:32644"

Query Match      4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      46 CTAACCCCTAACTGAGAGGG 65
      |||||
Db      20 CTAACCCCTAACTGAGAGGG 1

RESULT 187
LOCUS      AR063833/c
DEFINITION      Sequence 9 from patent US 5846723.
ACCESSION      AR063833
VERSION      AR063833.1 GI:5993141
KEYWORDS      Unknown.
ORGANISM      Unknown.
REFERENCE      1 (bases 1 to 19)
AUTHORS      Kim,N.Woo., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.
TITLE      Methods for detecting the RNA component of telomerase
JOURNAL      Patent: US 5846723-A 9 08-DEC-1998;
FEATURES
source      1..19
              /organism="unknown"
              /mol_type="unassigned DNA"

Query Match      4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      148 CCACCGTTTCATTCTAGAGC 166
      |||||
Db      19 CCACCGTTTCATTCTAGAGC 1

RESULT 188
LOCUS      AR241175/c
DEFINITION      Sequence 2 from patent US 6468983.
ACCESSION      AR241175
VERSION      AR241175.1 GI:27286405
KEYWORDS      Unknown.
ORGANISM      Unknown.
REFERENCE      1 (bases 1 to 19)
AUTHORS      Silverman,R.H., Kondo,S., Cowell,J.K., Li,G. and Torrence,P.F.
TITLE      RNase L activators and antisense oligonucleotides effective to
JOURNAL      treat telomerase-expressing malignancies
FEATURES
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Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      76 GTGCTTTTGTCTCCCGCGC 94
      |||||
Db      19 GTGCTTTTGTCTCCCGCGC 1

RESULT 189
LOCUS      BD023705/c
DEFINITION      Method for detecting and inhibiting RNA component of telomerase.
ACCESSION      BD023705
VERSION      BD023705.1 GI:22564928
KEYWORDS      JP 2001507229-A/9.
SOURCE      unidentified
ORGANISM      unidentified
REFERENCE      1 (bases 1 to 19)
AUTHORS      Kim,N.W., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.
TITLE      Method for detecting and inhibiting RNA component of telomerase
JOURNAL      Patent: JP 2001507229-A 9 05-JUN-2001;
COMMENT      GERON CORP
PN      JP 2001507229-A/9
PD      05-JUN-2001
PF      19-DEC-1997 JP 1998529003
PR      20-DEC-1996 US 08/770564,20-DEC-1996 US 08/770565 PI
NAM      WOO KIM,FRED WU,JAMES T KEALEY,RONALD PRUZAN,SCOTT L PI
WEINRICH
PC      C12N15/09,A61K9/08,A61K31/7105,A61K45/00,A61K48/00,A61P35/00,
PC      C12N5/10,
PC      C12N9/12,C12Q1/68,C12Q1/68,C12N15/00,C12N5/00 CC
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CC      Topology: Linear;
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Qy      148 CCACCGTTTCATTCTAGAGC 166
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Db      19 CCACCGTTTCATTCTAGAGC 1

RESULT 190
LOCUS      BD071093
DEFINITION      Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION      BD071093
VERSION      BD071093.1 GI:22616696
KEYWORDS      JP 2001517929-A/59.
SOURCE      unidentified
ORGANISM      unidentified
REFERENCE      1 (bases 1 to 19)
AUTHORS      Shay,J.W., Wright,W.E., Piatyazek,M.A., Corey,D. and Norton,J.C.
TITLE      Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL      Patent: JP 2001517929-A 59 09-OCT-2001;
COMMENT      GERON CORP
OS      Unidentified
PN      JP 2001517929-A/59
PD      09-OCT-2001
PF      09-APR-1997 JP 1997536487
PR      09-APR-1996 US 08/630019

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PI JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID  
PI COREY,  
PI JAMES C NORTON  
PC C07K14/00, A61K38/16, C12Q1/68  
CC Strandedness: Single;  
CC Topology: Linear;  
CC Modulation of mammalian telomerase by peptide nucleic acids FH  
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Db 1 GTCTAACCTTAACGTAGAA 19  
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BD084638 19 bp DNA linear PAT 27-AUG-2002  
LOCUS  
DEFINITION  
treat telomerase-expressing malignancies.  
ACCESSION  
BD084638  
VERSION  
BD084638.1 GI:22630248  
KEYWORDS  
JP 2001524100-A/2.  
SOURCE  
synthetic construct  
ORGANISM  
other sequences; artificial sequences.  
REFERENCE  
1 (bases 1 to 19)  
Silverman, R.H., Kondo, S., Cowell, J.K., Li, G. and Torrence, P.F.  
RNase L activators and antisense oligonucleotides effective to  
treat telomerase-expressing malignancies  
TITLE  
treat telomerase-expressing malignancies  
JOURNAL  
Patent: JP 2001524100-A 2 27-NOV-2001;  
THE CLEVELAND CLINIC FOUNDATION, NATIONAL INSTITUTES OF HEALTH  
COMMENT  
OS Artificial Sequence  
PN JP 2001524100-A/2  
PD 27-NOV-2001  
PF 13-APR-1998 JP 1998546125  
PR 21-APR-1997 US 60/044507, 03-FEB-1998 US 09/018125 PI  
ROBERT H SILVERMAN, SEIJI KONDO, JOHN K COWELL, GUIYING LI, PAUL F  
PI TORRENCE  
PC C07H21/00, C07H21/02, C12Q1/68, A61K48/00  
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Best Local Similarity 100.0%; Pred. No. 1.2e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 76 GTGCTTTTGTCTCCCGCGC 94  
Db 19 GTGCTTTTGTCTCCCGCGC 1  
RESULT 192  
A84597/c  
LOCUS  
DEFINITION  
Sequence 7 from Patent WO9845450.  
PI JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID  
PI COREY,  
PI JAMES C NORTON  
PC C07K14/00, A61K38/16, C12Q1/68  
CC Strandedness: Single;  
CC Topology: Linear;  
CC Modulation of mammalian telomerase by peptide nucleic acids FH  
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Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 44 GTCTAACCTTAACGTAGAA 62  
Db 1 GTCTAACCTTAACGTAGAA 19  
RESULT 191  
BD084638 19 bp DNA linear PAT 27-AUG-2002  
LOCUS  
DEFINITION  
treat telomerase-expressing malignancies.  
ACCESSION  
BD084638  
VERSION  
BD084638.1 GI:22630248  
KEYWORDS  
JP 2001524100-A/2.  
SOURCE  
synthetic construct  
ORGANISM  
other sequences; artificial sequences.  
REFERENCE  
1 (bases 1 to 19)  
Silverman, R.H., Kondo, S., Cowell, J.K., Li, G. and Torrence, P.F.  
RNase L activators and antisense oligonucleotides effective to  
treat telomerase-expressing malignancies  
TITLE  
treat telomerase-expressing malignancies  
JOURNAL  
Patent: JP 2001524100-A 2 27-NOV-2001;  
THE CLEVELAND CLINIC FOUNDATION, NATIONAL INSTITUTES OF HEALTH  
COMMENT  
OS Artificial Sequence  
PN JP 2001524100-A/2  
PD 27-NOV-2001  
PF 13-APR-1998 JP 1998546125  
PR 21-APR-1997 US 60/044507, 03-FEB-1998 US 09/018125 PI  
ROBERT H SILVERMAN, SEIJI KONDO, JOHN K COWELL, GUIYING LI, PAUL F  
PI TORRENCE  
PC C07H21/00, C07H21/02, C12Q1/68, A61K48/00  
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Best Local Similarity 100.0%; Pred. No. 1.2e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 76 GTGCTTTTGTCTCCCGCGC 94  
Db 19 GTGCTTTTGTCTCCCGCGC 1  
RESULT 192  
A84597/c  
LOCUS  
DEFINITION  
Sequence 7 from Patent WO9845450.

ACCESSION A84597  
VERSION A84597.1 GI:6733513  
KEYWORDS  
SOURCE unidentified  
ORGANISM unidentified  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Atkinson, E.M. and Kealey, J.T.  
TITLE PURIFIED TELOMERASE  
JOURNAL Patent: WO 9845450-A 7 15-OCT-1998;  
GERON CORP (US)  
FEATURES  
source 1..20  
Location/Qualifiers  
/organism="unidentified"  
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Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 361 AGGCCGCGAGAGAGGAAC 379  
Db 20 AGGCCGCGAGAGAGGAAC 2  
RESULT 193  
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LOCUS  
DEFINITION  
Sequence 14 from patent US 5968506.  
ACCESSION AR079898  
VERSION AR079898.1 GI:10006651  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Weinrich, S.L., Atkinson, E.M. III, Lichtsteiner, S.P., Vasserot, A.P.,  
Pruzan, R.A. and Kealey, J.T.  
TITLE Purified telomerase  
JOURNAL Patent: US 5968506-A 14 19-OCT-1999;  
FEATURES  
source 1..20  
Location/Qualifiers  
/organism="unknown"  
/mol\_type="unassigned DNA"  
Query Match 4.2%; Score 19; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 361 AGGCCGCGAGAGAGGAAC 379  
Db 20 AGGCCGCGAGAGAGGAAC 2  
RESULT 194  
BD058138/c  
LOCUS  
DEFINITION  
Purified telomerase.  
ACCESSION BD058138  
VERSION BD058138.1 GI:22603744  
KEYWORDS JP 2001509681-A/7.  
SOURCE Zea mayes  
ORGANISM Zea mayes  
REFERENCE  
AUTHORS Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;  
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD  
clade; Panicoideae; Andropogoneae; Zea.  
1 (bases 1 to 20)  
Weinrich, S.L., Ili, E.M.A., Lichtsteiner, S.P., Vasserot, A.P.,  
Pruzan, R.A. and Kealey, J.T.



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Query Match      4.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 1.4e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 102 TTCTCGCTGACTTTCAGCGG 121
Db 20 TTCTCGCTGACTTCCAGCGG 1

RESULT 198
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LOCUS      20 bp      DNA      linear      PAT 17-JUL-2003
DEFINITION Promoter region of mouse and human telomerase RNA component genes.
ACCESSION  BD225831
VERSION     BD225831.1 GI:33035601
KEYWORDS   JP 2002509699-A/34.
SOURCE     synthetic construct
ORGANISM   other sequences; artificial sequences.
REFERENCE  1 (bases 1 to 20)
AUTHORS    Keith,W.N.
TITLE      Promoter region of mouse and human telomerase RNA component genes
JOURNAL    Patent: JP 2002509699-A 34 02-APR-2002;
COMMENT    CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD
           OS Artificial Sequence
           PN JP 2002509699-A/34
           PD 02-APR-2002
           PF 29-JAN-1999 JP 2000529424
           PR 29-JAN-1998 GB 9801902.9
           PI WILLIAM NICOL KEITH
           PC
C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00, PC
A61K48/00,
PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC
,C12Q1/68//C12N9/12,
PC (A61K35/76,A61K31:522),C12N15/00,A61K37/02,C12N5/00 CC
Description of Artificial Sequence: Primer
FH Key Location/Qualifiers
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Query Match      4.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 1.4e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 102 TTCTCGCTGACTTTCAGCGG 121
Db 20 TTCTCGCTGACTTCCAGCGG 1

RESULT 199
AX019577/c
LOCUS      20 bp      DNA      linear      PAT 07-SEP-2000
DEFINITION Sequence 31 from Patent WO9938964.
ACCESSION  AX019577
VERSION     AX019577.1 GI:10043491
KEYWORDS   .
SOURCE     synthetic construct
ORGANISM   synthetic construct
           other sequences; artificial sequences.
REFERENCE  1
AUTHORS    Keith,W.N.
TITLE      Promoter regions of the mouse and human telomerase rna component
JOURNAL    genes
           Patent: WO 9938964-A 31 05-AUG-1999;
           KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)
FEATURES
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/db_xref="taxon:32630"
/notes="primer"

Query Match      4.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 1.4e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 102 TTCTCGCTGACTTTCAGCGG 121
Db 20 TTCTCGCTGACTTCCAGCGG 1

RESULT 201
BD196339
LOCUS      18 bp      DNA      linear      PAT 17-JUL-2003
DEFINITION Vertebrate telomerase genes and proteins and uses thereof.
ACCESSION  BD196339
VERSION     BD196339.1 GI:33006109
KEYWORDS   JP 2002514928-A/73.
SOURCE     synthetic construct
ORGANISM   synthetic construct
           other sequences; artificial sequences.
REFERENCE  1 (bases 1 to 18)
AUTHORS    Killian,A. and Bowtell,D.
TITLE      Vertebrate telomerase genes and proteins and uses thereof
JOURNAL    Patent: JP 2002514928-A 73 21-MAY-2002;
           CAMBIA BIOSYSTEMS LLC,PETER MACCALLUM CANCER INSTITUTE
           OS Artificial Sequence
           PN JP 2002514928-A/73
           PD 21-MAY-2002
           PF 01-JUL-1998 JP 1999508771
           PR 01-JUL-1997 US 60/051410,21-JUL-1997 US 60/053018 PR
           21-JUL-1997 US 60/053329,04-AUG-1997 US 60/054642 PR
           09-SEP-1997 US 60/058287
           PI ANDRZEJ KILIAN,DAVID BOWTELL
           PC C12N15/54,C12N9/12,A61K38/45,C07K16/40,C12Q1/68,C12Q1/48, PC
           C12N15/11,
           PC A61K31/70
           CC Description of Artificial Sequence:Synthesized Amplification
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CC      CC      Primer Design
CC      based on EST Sequence GenBank Accession Number AA281296 FH
Key      Location/Qualifiers
FT      source      1..18
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Query Match      4.0%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 GGGTTGCGGAGGTTGGGC 18
        |||||||
Db      1 GGGTTGCGGAGGTTGGGC 18

RESULT 202
BD071043/c
LOCUS      BD071043      18 bp      DNA      linear      PAT 27-AUG-2002
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION      BD071043
VERSION      BD071043.1 GI:22616646
KEYWORDS      JP 2001517929-A/9.
SOURCE      unidentified
ORGANISM      unclassified.
REFERENCE      1 (bases 1 to 18)
AUTHORS      Shay,J.W., Wright,W.E., Piatyazek,M.A., Corey,D. and Norton,J.C.
TITLE      Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL      Patent: JP 2001517929-A 9 09-OCT-2001;
COMMENT      GERON CORP
OS      Unidentified
PN      JP 2001517929-A/9
PD      09-OCT-2001
PF      09-APR-1997 JP 1997536487
PR      09-APR-1996 US 08/630019
PI      JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID
PI      COREY,
PI      JAMES C NORTON
PC      C07K14/00,A61K38/16,C12Q1/68
CC      Strandedness: Single;
CC      Topology: Linear;
CC      /desc = 'peptide nucleic acid (PNA), where (deoxy(ribose- CC
phosphate
CC      linkages are replaced by N-(2-aminoethyl)glycine units linked
to
CC      nucleotide bases via glycine amino N through a CC
methylene-carbonyl linker'
FH      Key      Location/Qualifiers
FT      source      1..18
FT      Location/Qualifiers
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Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      48 AACCTTAAGTGAAGGG 65
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Db      18 AACCTTAAGTGAAGGG 1

RESULT 203
BD225844
LOCUS      BD225844      22 bp      DNA      linear      PAT 17-JUL-2003

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DEFINITION      Promoter region of mouse and human telomerase RNA component genes.
ACCESSION      BD225844
VERSION      BD225844.1 GI:33035614
KEYWORDS      JP 2002509699-A/47.
SOURCE      synthetic construct
ORGANISM      synthetic construct
other sequences; artificial sequences.
REFERENCE      1 (bases 1 to 22)
AUTHORS      Keith,W.N.
JOURNAL      Promoter region of mouse and human telomerase RNA component genes
TITLE      Patent: JP 2002509699-A 47 02-APR-2002;
COMMENT      CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD
OS      Artificial Sequence
PN      JP 2002509699-A/47
PD      02-APR-2002
PF      29-JAN-1999 JP 2000529424
PR      29-JAN-1998 GB 9801902.9
PI      WILLIAM NICOL KEITH
PC      C12N15/09,A61K31/7105,A61K31/711,A61K35/76,A61K38/00,A61K45/00, PC
A61K48/00,
PC      A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC
C12Q1/68//C12N9/12.
PC      (A61K35/76,A61K31:522),C12N15/00,A61K37/02,C12N5/00 CC
Description of Artificial Sequence:Oligonucleotide FH Key
Location/Qualifiers
FT      source      1..22
FT      Location/Qualifiers
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Query Match      3.8%; Score 17.2; DB 1; Length 22;
Best Local Similarity 86.4%; Pred. No. 1.9e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy      15 GGGCCTGGGAGGGTGGTGCC 36
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Db      1 GGGCCTGGGTAAAGGTGGTGCC 22

RESULT 204
AX019593
LOCUS      AX019593      22 bp      DNA      linear      PAT 07-SEP-2000
DEFINITION      Sequence 47 from Patent WO9938964.
ACCESSION      AX019593
VERSION      AX019593.1 GI:10043507
KEYWORDS      synthetic construct
SOURCE      synthetic construct
ORGANISM      other sequences; artificial sequences.
REFERENCE      1
AUTHORS      Keith,W.N.
JOURNAL      Promoter regions of the mouse and human telomerase rna component
TITLE      Patent: WO 9938964-A 47 05-AUG-1999;
COMMENT      KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)
Location/Qualifiers
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Best Local Similarity 86.4%; Pred. No. 1.9e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy      15 GGGCCTGGGAGGGTGGTGCC 36
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Db      1 GGGCCTGGGTAAAGGTGGTGCC 22

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RESULT 205
AR063838/c
LOCUS AR063838 17 bp DNA linear PAT 29-SEP-1999
DEFINITION Sequence 14 from patent US 5846723.
ACCESSION AR063838
VERSION AR063838.1 GI:5993146
KEYWORDS
SOURCE
ORGANISM Unknown.
REFERENCE
1 (bases 1 to 17)
AUTHORS Kim,N.Woo., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.
TITLE Methods for detecting the RNA component of telomerase
JOURNAL Patent: US 5846723-A 14 08-DEC-1998;
FEATURES
source
1. .17
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Query Match 3.8%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.5e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 177 TGTGAGCTGCTGGCCCG 193
Db 17 TGTGAGCTGCTGGCCCG 1

RESULT 206
BD023710/c
LOCUS BD023710 17 bp DNA linear PAT 27-AUG-2002
DEFINITION Method for detecting and inhibiting RNA component of telomerase.
ACCESSION BD023710
VERSION BD023710.1 GI:22564933
KEYWORDS JP 2001507229-A/14.
SOURCE unidentified
ORGANISM unclassified.
REFERENCE
1 (bases 1 to 17)
AUTHORS Kim,N.W., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.
TITLE Method for detecting and inhibiting RNA component of telomerase
JOURNAL Patent: JP 2001507229-A 14 05-JUN-2001;
COMMENT GERON CORP
PN JP 2001507229-A/14
PD 05-JUN-2001
PF 19-DEC-1997 JP 1998529003
PR 20-DEC-1996 US 08/770564,20-DEC-1996 US 08/770565 PI
NAM WOO KIM,FRED WU,JAMES T KEALEY,RONALD PRUZAN,SCOTT L PI
WEINRICH
PC C12N15/09,A61K9/08,A61K31/7105,A61K45/00,A61K48/00,A61P35/00,
PC C12N5/10,
PC C12N9/12,C12Q1/68,C12Q1/68,C12N15/00,C12N5/00 CC
Strandedness: Single;
CC Topology: Linear;
/note="polynucleotide RP2"
FH Key Location/Qualifiers
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/organism="unassigned DNA"
/db_xref="taxon:32644"

Query Match 3.8%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.5e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 177 TGTGAGCTGCTGGCCCG 193
Db 17 TGTGAGCTGCTGGCCCG 1

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RESULT 207
E36993/c
LOCUS E36993 18 bp DNA linear PAT 18-JUN-2001
DEFINITION Human telomerase catalytic subunit promoter.
ACCESSION E36993
VERSION E36993.1 GI:13022956
KEYWORDS JP 1999253177-A/201.
SOURCE unidentified
ORGANISM unidentified
REFERENCE
1 (bases 1 to 18)
AUTHORS Thomas,R.S., Jochimu,R., Toru,N., Karen,B.C., Greg,B.M.,
Calvin,B.H. and William,H.A.
TITLE Human telomerase catalytic subunit promoter
JOURNAL Patent: JP 1999253177-A 201 21-SEP-1999;
JERON CORP,UNIVERSITY TECHNOLOGY CORP
OS Unidentified
COMMENT PN JP 1999253177-A/201
PD 21-SEP-1999
PF 15-OCT-1998 JP 1998320169
PR 01-OCT-1996 US 08/724.643,18-APR-1997 US 08/844.419, PR
25-APR-1997 US 08/846.017,06-MAY-1997 US 08/851.843, PR
09-MAY-1997 US 08/854.050,14-AUG-1997 US 08/911.312, PR
14-AUG-1997 US 08/912.951,14-AUG-1997 US 08/915.503 PI THOMAS
R SECHI,JOCHIMU RINGNER,TORU NAKAMURA,KAREN B CHAPMAN, PI GREG B
MORIN,
PI CALVIN B HAREI,WILLIAM H ANDREWS
PC C12N15/09,A61K31/70,A61K38/55,A61K39/395,A61K39/395,A61K48/00,
PC C12Q1/02,
PC C12Q1/48,C12Q1/68,G01N33/15,G01N33/48,G01N33/50//C07K14/47, PC
C07K16/40,
PC C12N1/19,C12N1/21,C12N5/10,C12N9/12,C12P21/08,C12N1/19, PC
C12R1/84),
PC (C12N1/21,C12R1:19),(C12N9/12,C12R1:19),(C12N9/12,C12R1:84),
PC (C12N9/12,C12R1:91),C12N15/00,A61K37/64,C12N5/00 CC
Strandedness: Single;
CC Topology: Linear;
FH Key Location/Qualifiers
1. .18
FT source
Location/Qualifiers
1. .18
/organism="Unidentified".

Query Match 3.6%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 1.7e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 149 CACCGTTCATTCTAGAGC 166
Db 18 CACCGTTCATTCTAGAGC 1

RESULT 208
AR390670/c
LOCUS AR390670 18 bp DNA linear PAT 18-DEC-2003
DEFINITION Sequence 543 from patent US 6610839.
ACCESSION AR390670
VERSION AR390670.1 GI:40112602
KEYWORDS
SOURCE
ORGANISM Unknown.
REFERENCE
1 (bases 1 to 18)
AUTHORS Morin,G.B. and Andrews,W.H.
TITLE Promoter for telomerase reverse transcriptase
JOURNAL Patent: US 6610839-A 543 26-AUG-2003;
FEATURES
source
1. .18
/mol_type="unknown"
/organism="genomic DNA"

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Query Match 3.6%; Score 16.4; DB 1; Length 18;  
Best Local Similarity 94.4%; Pred. No. 1.7e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
Qy 149 CACGGTTCATTCTAGAGC 166  
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Db 18 CACCCCTTCATTCTAGAGC 1

RESULT 209  
AR393284/c  
LOCUS AR393284 18 bp DNA linear PAT 18-DEC-2003  
DEFINITION Sequence 543 from patent US 6617110.  
ACCESSION AR393284  
VERSION AR393284.1 GI:40118644  
KEYWORDS  
SOURCE  
ORGANISM  
REFERENCE  
1 (bases 1 to 18)  
AUTHORS  
Cech,T.R., Lingner,J., Nakamura,T., Chapman,K.B., Morin,G.B.,  
Harley,C.B. and Andrews,W.H.  
TITLE  
Cells immortalized with telomerase reverse transcriptase for use in  
drug screening  
JOURNAL  
Patent: US 6617110-A 543 09-SEP-2003;  
FEATURES  
source  
1. .18  
/organism="unknown"  
/mol\_type="genomic DNA"

Query Match 3.6%; Score 16.4; DB 1; Length 18;  
Best Local Similarity 94.4%; Pred. No. 1.7e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
Qy 149 CACGGTTCATTCTAGAGC 166  
||||| ||||||| |||||||  
Db 18 CACCCCTTCATTCTAGAGC 1

RESULT 210  
AX810578/c  
LOCUS AX810578 18 bp DNA linear PAT 25-NOV-2003  
DEFINITION Sequence 543 from Patent EP1333094.  
ACCESSION AX810578  
VERSION AX810578.1 GI:38524067  
KEYWORDS  
SOURCE  
ORGANISM  
REFERENCE  
1  
AUTHORS  
Cech,T.R., Lingner,J., Nakamura,T., Chapman,K.B., Morin,G.B.,  
Harley,C.B. and Andrews,W.H.  
TITLE  
Human telomerase catalytic subunit  
JOURNAL  
Patent: EP 1333094-A 543 06-AUG-2003;  
Geron Corporation (US) ; University Technology Corporation (US)  
FEATURES  
source  
1. .18  
/organism="unidentified"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32644"

Query Match 3.6%; Score 16.4; DB 1; Length 18;  
Best Local Similarity 94.4%; Pred. No. 1.7e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
Qy 149 CACGGTTCATTCTAGAGC 166  
||||| ||||||| |||||||  
Db 18 CACCCCTTCATTCTAGAGC 1

RESULT 211  
BD011244/c

LOCUS BD011244 18 bp DNA linear PAT 31-JAN-2002  
DEFINITION Human telomerase catalytic subunit.  
ACCESSION BD011244  
VERSION BD011244.1 GI:18639617  
KEYWORDS  
SOURCE  
ORGANISM  
REFERENCE  
1 (bases 1 to 18)  
AUTHORS  
Sechi,T.R., Lingner,J., Nakamura,T., Chapman,K.B., Mori,G.B.,  
Harley,C.B. and Andrews,W.H.  
TITLE  
Human telomerase catalytic subunit  
JOURNAL  
Patent: JP 2001081042-A 201 27-MAR-2001;  
GERON CORP, UNIVERSITY TECHNOLOGY CORP  
COMMENT  
OS Unidentified  
PN JP 2001081042-A/201  
PD 27-MAR-2001

PF 27-JUL-2000 JP 2000227474  
PR 01-OCT-1996 US 08/724643,18-APR-1997 US 08/844419 PR  
25-APR-1997 US 08/846017,06-MAY-1997 US 08/851843 PR  
09-MAY-1997 US 08/854050,14-AUG-1997 US 08/911312 PR  
14-AUG-1997 US 08/912951,14-AUG-1997 US 08/915503 PI THOMAS  
R SECHI,JOACHIM LINGNER,TORU NAKAMURA,KAREN B CHAPMAN,PI GREG B  
MORIN  
PI CALVIN B HARLEY,WILLIAM H ANDREWS  
PC A61K38/00,A61K31/7088,A61K39/00,A61K48/00,A61P35/00,A61P43/00,  
PC C07K5/10,  
PC C07K5/107,C07K5/117,C07K7/06,C07K7/08,C07K16/40,C12N9/12, PC  
C12N15/09,  
PC C12Q1/02,C12Q1/48,C12Q1/68,G01N33/15,G01N33/50,G01N33/53, PC  
G01N33/53,  
PC G01N33/566,G01N33/573//C12P21/08,A61K37/02,C12N15/00 CC  
Strandedness: Single;  
CC Topology: Linear;  
FH Key Location/Qualifiers  
FT source 1.18  
/organism="Unidentified".  
Location/Qualifiers  
1. .18  
/organism="unidentified"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32644"

Query Match 3.6%; Score 16.4; DB 1; Length 18;  
Best Local Similarity 94.4%; Pred. No. 1.7e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
Qy 149 CACGGTTCATTCTAGAGC 166  
||||| ||||||| |||||||  
Db 18 CACCCCTTCATTCTAGAGC 1

RESULT 212  
BD196340/c  
LOCUS BD196340 21 bp DNA linear PAT 17-JUL-2003  
DEFINITION Vertebrate telomerase genes and proteins and uses thereof.  
ACCESSION BD196340  
VERSION BD196340.1 GI:33006110  
KEYWORDS  
SOURCE  
ORGANISM  
REFERENCE  
1 (bases 1 to 21)  
AUTHORS  
Kilian,A. and Bowtell,D.  
TITLE  
Vertebrate telomerase genes and proteins and uses thereof  
JOURNAL  
Patent: JP 2002514928-A 74 21-MAY-2002;  
CAMBIA BIOSYSTEMS LLC,PETER MACCALLUM CANCER INSTITUTE  
COMMENT  
OS Artificial Sequence  
PN JP 2002514928-A/74  
PD 21-MAY-2002  
PF 01-JUL-1998 JP 1999508771  
PR 01-JUL-1997 US 60/051410,21-JUL-1997 US 60/053018 PR  
21-JUL-1997 US 60/053329,04-AUG-1997 US 60/054642 PR

09-SEP-1997 US 60/058287  
PI ANDRZEJ KILIAN, DAVID BOWTELL  
PC C12N15/54, C12N9/12, A61K38/45, C07K16/40, C12Q1/68, C12Q1/48, PC  
C12N15/11,  
PC A61K31/70  
CC Description of Artificial Sequence: Synthesized Amplification  
CC Primer Design  
CC based on EST Sequence GenBank Accession Number AA281296 FH  
Key Location/Qualifiers  
FT source 1..21  
/organism='Artificial Sequence'.  
FEATURES  
source  
1..21  
/organism="synthetic construct"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32630"  
Query Match 3.6%; Score 16.2; DB 1; Length 21;  
Best Local Similarity 85.7%; Pred. No. 2.1e+02;  
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Qy 431 CAGGACTCGGCTCACACATGC 451  
Db 21 CAGGACTCGGCTCACACTGC 1  
RESULT 213  
AR193717  
LOCUS AR193717 21 bp DNA linear PAT 20-APR-2002  
DEFINITION Sequence 13 from patent US 6348327.  
ACCESSION AR193717  
VERSION AR193717.1 GI:20240309  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 21)  
AUTHORS Gorman, C.M. and Groskreutz, D.J.  
TITLE Non-endocrine animal host cells capable of expressing variant  
proinsulin and processing the same to form active, mature insulin  
and methods of culturing such cells  
JOURNAL Patent: US 6348327-A 13 19-FEB-2002;  
FEATURES Location/Qualifiers  
source 1..21  
/organism="unknown"  
/mol\_type="unassigned DNA"  
Query Match 3.6%; Score 16.2; DB 1; Length 21;  
Best Local Similarity 85.7%; Pred. No. 2.1e+02;  
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
Qy 156 CATTCTAGAGCAACAAACAAA 176  
Db 1 CATTCTAGAGCAACAGACAA 21  
RESULT 214  
BD071060  
LOCUS BD071060 16 bp DNA linear PAT 27-AUG-2002  
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.  
ACCESSION BD071060  
VERSION BD071060.1 GI:22616663  
KEYWORDS JP 2001517929-A/26.  
SOURCE unidentified  
ORGANISM unclassified.  
REFERENCE 1 (bases 1 to 16)  
AUTHORS Shay, J.W., Wright, W.E., Piatyszek, M.A., Corey, D. and Norton, J.C.  
TITLE Modulation of mammalian telomerase by peptide nucleic acids  
JOURNAL Patent: JP 2001517929-A 26 09-OCT-2001;  
COMMENT GERON CORP  
OS Unidentified  
PN JP 2001517929-A/26

09-OCT-2001  
PD 09-APR-1997 JP 1997536487  
PF 09-APR-1996 US 08/630019  
PI JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID  
PI COREY,  
PI JAMES C NORTON  
PC C07K14/00, A61K38/16, C12Q1/68  
CC Strandedness: Single;  
CC Topology: Linear;  
CC /desc = 'peptide nucleic acid (PNA), where (deoxy(ribose- CC  
phosphate  
linkages are replaced by N-(2-aminoethyl)glycine units linked  
to  
CC nucleotide bases via glycine amino N through a CC  
methylenecarbonyl linker'  
FH Key Location/Qualifiers  
FT source 1..16  
/organism='Unidentified'.  
FEATURES Location/Qualifiers  
source 1..16  
/organism="unidentified"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32644"  
Query Match 3.5%; Score 16; DB 1; Length 16;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 53 TAACTGAGAAGGCGCT 68  
Db 1 TAACTGAGAAGGCGCT 16  
RESULT 215  
BD225814  
LOCUS BD225814 20 bp DNA linear PAT 17-JUL-2003  
DEFINITION Promoter region of mouse and human telomerase RNA component genes.  
ACCESSION BD225814  
VERSION BD225814.1 GI:33035584  
KEYWORDS JP 2002509699-A/17.  
SOURCE synthetic construct  
ORGANISM synthetic construct  
other sequences; artificial sequences.  
REFERENCE 1 (bases 1 to 20)  
AUTHORS Keith, W.N.  
TITLE Promoter region of mouse and human telomerase RNA component genes  
JOURNAL Patent: JP 2002509699-A 17 02-APR-2002;  
COMMENT CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD  
OS Artificial Sequence  
PN JP 2002509699-A/17  
PD 02-APR-2002  
PF 29-JAN-1999 JP 2000529424  
PR 29-JAN-1998 GB 9801902.9  
PI WILLIAM NICOL KEITH  
PC C12N15/09, A61K31/7105, A61K31/711, A61K35/76, A61K38/00, A61K45/00, PC  
A61K48/00,  
PC A61P35/00, C12N1/15, C12N1/19, C12N1/21, C12N5/10, C12P21/02 PC  
, C12Q1/68//C12N9/12,  
PC (A61K35/76, A61K31:522), C12N15/00, A61K37/02, C12N5/00 CC  
Description of Artificial Sequence: Primer  
FH Key Location/Qualifiers  
FT source 1..20  
/organism='Artificial Sequence'.  
FEATURES Location/Qualifiers  
source 1..20  
/organism="synthetic construct"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:32630"  
Query Match 3.5%; Score 16; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 2e+02;  
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;



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/db_xref="taxon:9606"

Query Match      3.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 2.2e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 436 CTCGGCTCACACATGC 451
Db 1 CTCGGCTCACACATGC 16

RESULT 216
AX019563
LOCUS      20 bp      DNA      linear      PAT 07-SEP-2000
DEFINITION Sequence 17 from Patent WO938964.
ACCESSION AX019563
VERSION    AX019563.1 GI:10043477
KEYWORDS   .
SOURCE     synthetic construct
ORGANISM   other sequences; artificial sequences.
REFERENCE  1
AUTHORS    Keith,W.N.
TITLE      Promoter regions of the mouse and human telomerase rna component
JOURNAL    Patent: WO 938964-A 17 05-AUG-1999;
           KEITH WILLIAM NICOL (GB); CANCER RES CAMPAIGN TECH (GB)
FEATURES   source
           1..20
           /organism="synthetic construct"
           /mol_type="unassigned DNA"
           /db_xref="taxon:32630"
           /note="primer"

Query Match      3.5%; Score 16; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2e+02;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 436 CTCGGCTCACACATGC 451
Db 1 CTCGGCTCACACATGC 16

RESULT 217
BD221936
LOCUS      20 bp      DNA      linear      PAT 17-JUL-2003
DEFINITION Nucleic acid encoding retinoblastoma-binding protein (RBP-7) and
ACCESSION BD221936
VERSION    BD221936.1 GI:33031706
KEYWORDS   JP 2002519027-A/75.
SOURCE     Homo sapiens (human)
ORGANISM   Homo sapiens
REFERENCE  1 (bases 1 to 20)
AUTHORS    Bougueleret L.
TITLE      Nucleic acid encoding retinoblastoma-binding protein (RBP-7) and
JOURNAL    polymorphic marker relating to the nucleic acid
           Patent: JP 2002519027-A 75 02-JUL-2002;
           GENSET
COMMENT    OS Homo sapiens (human)
           PN JP 2002519027-A/75
           PD 02-JUL-2002
           PF 30-JUN-1999 JP 2000557360
           PR 30-JUN-1998 US 60/091315,10-DEC-1998 US 60/111909 PT
           LYDIE BOUGUELERET
           PC C12N15/09,C12N15/09,A01K67/027,C07K14/47,C07K16/18,C12N5/10,
           PC C1201/68.
           PC G01N33/53,G01N33/566,C12N15/00,C12N5/00,C12N15/00 CC
           upstream amplification primer for SEQ 34, SEQ 55, SEQ 35, SEQ CC
           56
FH Key      Location/Qualifiers
FT primer_bind 1..20.
           Location/Qualifiers
           1..20
           /organism="Homo sapiens"
           /mol_type="genomic DNA"

Query Match      3.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 2.2e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 166 CAAACAAAATAATGTCAG 182
Db 1 CAAACAAAATAATGTCAG 17

RESULT 218
AR211866
LOCUS      20 bp      DNA      linear      PAT 20-JUN-2002
DEFINITION Sequence 76 from patent US 6399373.
ACCESSION AR211866
VERSION    AR211866.1 GI:21515301
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unclassified.
REFERENCE  1 (bases 1 to 20)
AUTHORS    Bougueleret,L.
TITLE      Nucleic acid encoding a retinoblastoma binding protein (RBP-7) and
JOURNAL    polymorphic markers associated with said nucleic acid
           Patent: US 6399373-A 76 04-JUN-2002;
           Location/Qualifiers
FEATURES   source
           1..20
           /organism="unknown"
           /mol_type="unassigned DNA"

Query Match      3.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 2.2e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 166 CAAACAAAATAATGTCAG 182
Db 1 CAAACAAAATAATGTCAG 17

RESULT 219
AR199735
LOCUS      20 bp      DNA      linear      PAT 20-APR-2002
DEFINITION Sequence 11 from patent US 6355481.
ACCESSION AR199735
VERSION    AR199735.1 GI:20249809
KEYWORDS   .
SOURCE     Unknown.
ORGANISM   Unclassified.
REFERENCE  1 (bases 1 to 20)
AUTHORS    Li,X.-J. and Li,S.-H.
TITLE      Hybridoma cell line and monoclonal antibody for huntingtin protein
JOURNAL    Patent: US 6355481-A 11 12-MAR-2002;
           Location/Qualifiers
FEATURES   source
           1..20
           /organism="unknown"
           /mol_type="unassigned DNA"

Query Match      3.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 313 CTGTCCAGCGCGGTCTCTC 332
Db 1 CTGTCTGCCACGCGGTTTCTC 20

RESULT 220
AX060355
LOCUS      20 bp      DNA      linear      PAT 22-JAN-2001
DEFINITION Sequence 11 from Patent WO078813.
ACCESSION AX060355
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VERSION AX060355.1 GI:12405842
KEYWORDS .
SOURCE synthetic construct
ORGANISM synthetic construct
REFERENCE 1
AUTHORS Li,X.J. and Li,S.H.
TITLE Huntington disease cellular model: stably transfected pc12 cells
JOURNAL expressing mutant huntingtin
Patent: WO 0078813-A 11 28-DEC-2000;
Emory University (US)
FEATURES
source Location/Qualifiers
1..20
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="PCR primer"
Query Match 3.3%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 313 CTGTCAGCGCGGCTCTC 332
Db 1 CTGTCGCCACGGGTTCTC 20
RESULT 221
AR063834/c
LOCUS AR063834 15 bp DNA linear PAT 29-SEP-1999
DEFINITION Sequence 10 from patent US 5846723.
ACCESSION AR063834
VERSION AR063834.1 GI:5993142
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 15)
AUTHORS Kim,N.Woo., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.
TITLE Methods for detecting the RNA component of telomerase
JOURNAL Patent: US 5846723-A 10 08-DEC-1998;
FEATURES
source Location/Qualifiers
1..15
/organism="unknown"
/mol_type="unassigned DNA"
Query Match 3.3%; Score 15; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 152 CGTTCATCTAGAGC 166
Db 15 CGTTCATCTAGAGC 1
RESULT 222
BD023706/c
LOCUS BD023706 15 bp DNA linear PAT 27-AUG-2002
DEFINITION Method for detecting and inhibiting RNA component of telomerase.
ACCESSION BD023706
VERSION BD023706.1 GI:22564929
KEYWORDS JP 2001507229-A/10.
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1 (bases 1 to 15)
AUTHORS Kim,N.W., Wu,F., Kealey,J.T., Pruzan,R. and Weinrich,S.L.
TITLE Method for detecting and inhibiting RNA component of telomerase
JOURNAL Patent: JP 2001507229-A 10 05-JUN-2001;
GERON CORP
COMMENT FN JP 2001507229-A/10
PD 05-JUN-2001
PF 19-DEC-1997 JP 1998529003

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PR 20-DEC-1996 US 08/770564,20-DEC-1996 US 08/770565 PI
NAM WOO KIM, FRED WU, JAMES T KEALEY, RONALD PRUZAN, SCOTT L PI
WEINRICH
PC C12N15/09,A61K9/08,A61K31/7105,A61K45/00,A61K48/00,A61P35/00,
PC C12N5/10,
PC C12N9/12,C12Q1/68,C12Q1/68,C12N15/00,C12N5/00 CC
Strandedness: Single;
CC Topology: Linear;
CC /note= 'oligo 21ab3',
PH Key Location/Qualifiers.
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/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
Query Match 3.3%; Score 15; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 152 CGTTCATCTAGAGC 166
Db 15 CGTTCATCTAGAGC 1
RESULT 223
BD071036/c
LOCUS BD071036 15 bp DNA linear PAT 27-AUG-2002
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION BD071036
VERSION BD071036.1 GI:22616639
KEYWORDS JP 2001517929-A/2.
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1 (bases 1 to 15)
AUTHORS Shay,J.W., Wright,W.E., Piatyszek,M.A., Corey,D. and Norton,J.C.
TITLE Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL Patent: JP 2001517929-A 2 09-OCT-2001;
GERON CORP
COMMENT OS Unidentified
PN JP 2001517929-A/2
PD 09-OCT-2001
PF 09-APR-1997 JP 1997536487
PR 09-APR-1996 US 08/630019
PI JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID
PI COREY, C NORTON
PI JAMES C NORTON
PC C07K14/00,A61K38/16,C12Q1/68
CC Strandedness: Single;
CC Topology: Linear;
CC /desc = 'peptide nucleic acid (PNA), where (deoxy(ribose- CC
phosphate
linkages are replaced by N-(2-aminoethyl)glycine units linked
to
nucleotide bases via glycine amino N through a CC
methylenecarbonyl linker'
PH Key Location/Qualifiers
1..15
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
FEATURES
source Location/Qualifiers
1..15
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
Query Match 3.3%; Score 15; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 46 CTAACCCCTAACTGAG 60
Db 15 CTAACCCCTAACTGAG 1

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RESULT 224
BD071039/c
LOCUS          15 bp      DNA      linear      PAT 27-AUG-2002
DEFINITION     Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION      BD071039
VERSION        BD071039.1 GI:22616642
KEYWORDS       JP 2001517929-A/5.
SOURCE         unidentified
ORGANISM       unclassified.
1 (bases 1 to 15)
Shay,J.W., Wright,W.E., Piatyszek,M.A., Corey,D. and Norton,J.C.
AUTHORS        Modulation of mammalian telomerase by peptide nucleic acids
TITLE          Patent: JP 2001517929-A 5 09-OCT-2001;
JOURNAL        GERON CORP
COMMENT        OS Unidentified
PN JP 2001517929-A/5
PD 09-OCT-2001
PF 09-APR-1997 JP 1997536487
PR 09-APR-1996 US 08/630019
PI JERRY W SHAY,WOODRING E WRIGHT,MIECZYSLAW A PIATYSZEK,DAVID
PI COREY, C NORTON
PC C07K14/00,A61K38/16,C12Q1/68
CC Strandedness: Single;
CC Topology: Linear;
CC /desc = 'peptide nucleic acid (PNA), where (deoxy(ribose- CC
phosphate
linkages are replaced by N-(2-aminoethyl)glycine units linked
to
nucleotide bases via glycine amino N through a CC
methylenecarbonyl linker',
FH Key Location/Qualifiers
FT source 1..15
/organism='Unidentified'.
FEATURES
source
1..15
Location/Qualifiers
/organism='unidentified'
/mol_type='genomic DNA'
/db_xref='taxon:32644'
Query Match 3.3%; Score 15; DB 1; Length 15;
Best Local Similarity 100.0%; Pred.No. 1.8e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 49 ACCCTAACTGAGAAG 63
Db 1 ACCCTAACTGAGAAG 15
|||||
RESULT 226
BD071078/c
LOCUS          15 bp      DNA      linear      PAT 27-AUG-2002
DEFINITION     Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION      BD071078
VERSION        BD071078.1 GI:22616681
KEYWORDS       JP 2001517929-A/44.
SOURCE         unidentified
ORGANISM       unclassified.
1 (bases 1 to 15)
Shay,J.W., Wright,W.E., Piatyszek,M.A., Corey,D. and Norton,J.C.
AUTHORS        Modulation of mammalian telomerase by peptide nucleic acids
TITLE          Patent: JP 2001517929-A 44 09-OCT-2001;
JOURNAL        GERON CORP
COMMENT        OS Unidentified
PN JP 2001517929-A/44
PD 09-OCT-2001
PF 09-APR-1997 JP 1997536487
PR 09-APR-1996 US 08/630019
PI JERRY W SHAY,WOODRING E WRIGHT,MIECZYSLAW A PIATYSZEK,DAVID
PI COREY, C NORTON
PC C07K14/00,A61K38/16,C12Q1/68
CC Strandedness: Single;
CC Topology: Linear;
CC /desc = 'phosphorothioate (PS) nucleic acid'
FH Key Location/Qualifiers
FT source 1..15
/organism='Unidentified'.
FEATURES
source
1..15
Location/Qualifiers
/organism='unidentified'
/mol_type='genomic DNA'
/db_xref='taxon:32644'
Query Match 3.3%; Score 15; DB 1; Length 15;
Best Local Similarity 100.0%; Pred.No. 1.8e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 46 CTAACCCCTAACTGAG 60
Db 15 CTAACCCCTAACTGAG 1
|||||
RESULT 225
BD071061
LOCUS          15 bp      DNA      linear      PAT 27-AUG-2002
DEFINITION     Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION      BD071061
VERSION        BD071061.1 GI:22616664
KEYWORDS       JP 2001517929-A/27.
SOURCE         unidentified
ORGANISM       unclassified.
1 (bases 1 to 15)
Shay,J.W., Wright,W.E., Piatyszek,M.A., Corey,D. and Norton,J.C.
AUTHORS        Modulation of mammalian telomerase by peptide nucleic acids
TITLE          Patent: JP 2001517929-A 27 09-OCT-2001;
JOURNAL        GERON CORP
COMMENT        OS Unidentified
PN JP 2001517929-A/27
PD 09-OCT-2001
PF 09-APR-1997 JP 1997536487
PR 09-APR-1996 US 08/630019
PI JERRY W SHAY,WOODRING E WRIGHT,MIECZYSLAW A PIATYSZEK,DAVID
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RESULT 227
AX613673
LOCUS          AX613673          20 bp      DNA
DEFINITION     Sequence 4698 from Patent WO02072882.
ACCESSION      AX613673
VERSION        AX613673.1  GI:28409102
KEYWORDS       Homo sapiens (human)
SOURCE         Homo sapiens
ORGANISM       Homo sapiens
REFERENCE      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
AUTHORS       Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
TITLE         Cullen,P. and Seedorf,U.
JOURNAL       Patent: WO 02072882-A 4698 19-SEP-2002;
              OGHAM GmbH (DE)
FEATURES       Location/Qualifiers
               source
               1..20
               /organism="Homo sapiens"
               /mol_type="unassigned DNA"
               /db_xref="taxon:9606"

Query Match          3.3%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.3e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 269 GGGCTTCCTCCGAGG 283
Db 3 GGGCTTCCTCCGAGG 17

RESULT 228
AR241369/c
LOCUS          AR241369          18 bp      DNA
DEFINITION     Sequence 4 from patent US 6469156.
ACCESSION      AR241369
VERSION        AR241369.1  GI:27287033
KEYWORDS       Unknown.
SOURCE         Unknown.
ORGANISM       Unclassified.
REFERENCE      1 (bases 1 to 18)
AUTHORS       Schafer,M.P. and Reid,T.M.
TITLE         Rapid and sensitive method for detecting histoplasma capsulatum
JOURNAL       Patent: US 6469156-A 4 22-OCT-2002;
FEATURES       Location/Qualifiers
               source
               1..18
               /organism="unknown"
               /mol_type="genomic DNA"

Query Match          3.3%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 2.2e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 410 CTGAGCTGTGGACGTGC 427
Db 18 CTGACCGTGGGACGTGC 1

RESULT 229
I74343
LOCUS          I74343          19 bp      DNA
DEFINITION     Sequence 22 from patent US 5688643.
ACCESSION      I74343
VERSION        I74343.1  GI:3010484
KEYWORDS       Unknown.
SOURCE         Unknown.
ORGANISM       Unknown.
REFERENCE      1 (bases 1 to 19)
AUTHORS       Oka,T., Matsunaga,H. and Yamane,A.
TITLE         Method of nucleic acid-differentiation and assay kit for nucleic

acid differentiation
Patent: US 5688643-A 22 18-NOV-1997;
Location/Qualifiers
 1..19
 /organism="unknown"
 /mol_type="unassigned DNA"

Query Match          3.3%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 2.3e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 348 GTTCAGGCGCTTCAGGCC 365
Db 1 GATCAGGCGCTTTAGGCC 18

RESULT 230
ABI75197
LOCUS          ABI75197          19 bp      DNA
DEFINITION     Synthetic construct DNA, forward primer for Japanese flounder
               microsatellite sequence Pol1104HFS-M.
ACCESSION      ABI75197
VERSION        ABI75197.1  GI:45752520
KEYWORDS       synthetic construct
SOURCE         synthetic construct
ORGANISM       other sequences; artificial sequences.
REFERENCE      1
AUTHORS       Fuji,K., Kobayashi,K., Mizuta,A., Hasegawa,O., Tabata,K.,
               Sakamoto,T. and Okamoto,N.
TITLE         A genetic linkage map of the Japanese Flounder, (Paralichthys
               olivaceus)
JOURNAL       Unpublished
REFERENCE      2 (bases 1 to 19)
AUTHORS       Mizuta,A., Tabata,K., Kobayashi,K., Fuji,K., Sakamoto,T. and
               Okamoto,N.
TITLE         Direct Submission
JOURNAL       Submitted (24-MAR-2004) Nobuaki Okamoto, Tokyo University of Marine
               Science and Technology, Department of Marine Biosciences; 4-5-7
               Konan, Minato-Ku, Tokyo 108-8477, Japan
               (E-mail:nokamoto@kaiyodai.ac.jp, Tel:81-3-5463-0547,
               Fax:81-3-5463-0552)
FEATURES       Location/Qualifiers
               source
               1..19
               /organism="synthetic construct"
               /mol_type="other DNA"
               /db_xref="taxon:32630"
               misc_feature
               1..19
               /note="forward primer for Japanese flounder microsatellite
               sequence Pol1104MHFS"

Query Match          3.3%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 2.3e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 89 CCGCGCGCTGTTCCTC 106
Db 2 CCGCTCGCTGTTCCTC 19

RESULT 231
BD274798
LOCUS          BD274798          18 bp      DNA
DEFINITION     CANCER CELL VACCINE.
ACCESSION      BD274798
VERSION        BD274798.1  GI:33084566
KEYWORDS       JP 2002531582-A/23.
SOURCE         synthetic construct
ORGANISM       synthetic construct
REFERENCE      1 (bases 1 to 18)
AUTHORS       Kusu,M., Qiu,G. and Hunfreys,R.
TITLE         CANCER CELL VACCINE
```

JOURNAL Patent: JP 2002531582-A 23 24-SEP-2002;  
 COMMENT ANTIGEN EXPRESS INC  
 PN JP 2002531582-A/23  
 PD 24-SEP-2002  
 PF 24-NOV-1999 JP 2000586901  
 PR 04-DEC-1998 US 09/205995  
 PI minzhen kusu, gang qiu, robert hunfreese  
 CC Description of Artificial Sequence: antisense oligonucleotide  
 CC corresponding  
 CC to a specific region of the mouse Ii gene.  
 FH Key Location/Qualifiers.

FEATURES  
 source  
 1. .18  
 /organism="synthetic construct"  
 /mol\_type="genomic DNA"  
 /db\_xref="taxon:32630"

Query Match 3.2%; Score 14.4; DB 1; Length 18;  
 Best Local Similarity 93.8%; Pred. No. 2.3e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 220 GGTGGCTGCCCCAGCC 235  
 ||| ||||| |||||  
 Db 1 GGTGGCTGCCCCAGCC 16

RESULT 232  
 AR205264  
 LOCUS AR205264 18 bp DNA linear PAT 20-JUN-2002  
 DEFINITION Sequence 24 from patent US 6368855.  
 ACCESSION AR205264  
 VERSION AR205264.1 GI:21502804  
 KEYWORDS  
 SOURCE Unknown.  
 ORGANISM Unknown.

REFERENCE 1 (bases 1 to 18)  
 AUTHORS Xu, M., Qiu, G. and Humphreys, R.  
 TITLE MHC class II antigen presenting cells containing oligonucleotides  
 which inhibit Ii protein expression  
 JOURNAL Patent: US 6368855-A 24 09-APR-2002;  
 FEATURES Location/Qualifiers  
 source  
 1. .18  
 /organism="unknown"  
 /mol\_type="unassigned DNA"

Query Match 3.2%; Score 14.4; DB 1; Length 18;  
 Best Local Similarity 93.8%; Pred. No. 2.3e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 220 GGTGGCTGCCCCAGCC 235  
 ||| ||||| |||||  
 Db 1 GGTGGCTGCCCCAGCC 16

RESULT 233  
 AX055663  
 LOCUS AX055663 17 bp DNA linear PAT 13-JAN-2001  
 DEFINITION Sequence 21 from Patent WO0073499.  
 ACCESSION AX055663  
 VERSION AX055663.1 GI:12228803  
 KEYWORDS Aspergillus versicolor  
 SOURCE Aspergillus versicolor  
 ORGANISM Aspergillus versicolor  
 Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;  
 Eurotiales; Trichocomaceae; mitosporic Trichocomaceae; Aspergillus.

REFERENCE 1  
 AUTHORS Smith, T., Maher, M., Martin, C., Jannes, G., Roseau, R. and van der  
 Weide, M.  
 TITLE Nucleic acid probes and methods for detecting clinically important  
 fungal pathogens  
 JOURNAL Patent: WO 0073499-A 21 07-DEC-2000;

JOURNAL Patent: JP 2002531582-A 23 24-SEP-2002;  
 COMMENT ANTIGEN EXPRESS INC  
 PN JP 2002531582-A/23  
 PD 24-SEP-2002  
 PF 24-NOV-1999 JP 2000586901  
 PR 04-DEC-1998 US 09/205995  
 PI minzhen kusu, gang qiu, robert hunfreese  
 CC Description of Artificial Sequence: antisense oligonucleotide  
 CC corresponding  
 CC to a specific region of the mouse Ii gene.  
 FH Key Location/Qualifiers.

FEATURES  
 source  
 1. .17  
 /organism="Aspergillus versicolor"  
 /mol\_type="unassigned DNA"  
 /db\_xref="taxon:46472"

Query Match 3.1%; Score 14; DB 1; Length 17;  
 Best Local Similarity 100.0%; Pred. No. 2.4e+02;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 328 CTCTCGGGCGCGAG 341  
 ||||| ||||| |||||  
 Db 2 CTCTCGGGCGCGAG 15

RESULT 234  
 AX099957/c  
 LOCUS AX099957 17 bp DNA linear PAT 02-APR-2001  
 DEFINITION Sequence 17 from Patent WO0120034.  
 ACCESSION AX099957  
 VERSION AX099957.1 GI:13538967  
 KEYWORDS Mus musculus (house mouse)  
 SOURCE Mus musculus  
 ORGANISM Mus musculus  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

REFERENCE 1  
 AUTHORS Voss, J. and Timm, J.  
 TITLE Methods and compositions for the screening of cell cycle modulators  
 JOURNAL Patent: WO 0120034-A 17 22-MAR-2001;  
 BASF AKTIENGESSELLSCHAFT (DE)  
 FEATURES Location/Qualifiers  
 source  
 1. .17  
 /organism="Mus musculus"  
 /mol\_type="unassigned DNA"  
 /db\_xref="taxon:10090"

Query Match 3.1%; Score 14; DB 1; Length 17;  
 Best Local Similarity 100.0%; Pred. No. 2.4e+02;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 155 TCATTCTAGAGCAA 168  
 ||||| ||||| |||||  
 Db 15 TCATTCTAGAGCAA 2

RESULT 235  
 BD251610  
 LOCUS BD251610 17 bp DNA linear PAT 17-JUL-2003  
 DEFINITION Selection of animal based on character imprinted by patent.  
 ACCESSION BD251610  
 VERSION BD251610.1 GI:33061380  
 KEYWORDS JP 2002535963-A/130.  
 SOURCE Sus scrofa (pig)  
 ORGANISM Sus scrofa  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.

REFERENCE 1 (bases 1 to 17)  
 AUTHORS Andersson, L., Georges, M., Spincemalle, G. and Nezer, C.D.A.  
 TITLE Selection of animal based on character imprinted by parent  
 JOURNAL Patent: JP 2002535963-A 130 29-OCT-2002;  
 UNIVERSITY OF LIEGE, MELICA HB, SEGHERS GENTEC NV  
 COMMENT OS Sus scrofa (pig)  
 PN JP 2002535963-A/130  
 PD 29-OCT-2002  
 PF 16-DEC-1999 JP 2000588390  
 PR 16-DEC-1998 EP 98204291.3  
 PI LEIF ANDERSSON, MICHEL GEORGES, GEERT SPINCEMAILLE, PI CARINE  
 DANIELLE ANDREE NEZER  
 PC C12N15/09.A01K67/027, C12N5/06, C12Q1/68, C12N15/00, C12N5/00 CC  
 /note="Polymorphism Tyrosine Hydroxylase gene" FH Key

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Location/Qualifiers
FT source 1..17
/organism='Sus scrofa (pig)'.

FEATURES
source
  Location/Qualifiers
    1..17
    /organism='Sus scrofa'
    /mol_type='genomic DNA'
    /db_xref='taxon:9823'

Query Match
Best Local Similarity 3.1%; Score 13.8; DB 1; Length 17;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 5 TCGCGAGGTGGGCTG 21
    |||||
Db 1 TCGCGAGGGGGACCTG 17

RESULT 236
I86370
LOCUS I86370 17 bp DNA linear PAT 10-JUN-1998
DEFINITION Sequence 2 from patent US 5700922.
ACCESSION I86370
VERSION I86370.1 GI:3206088
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE
AUTHORS 1 (bases 1 to 17)
TITLE PNA-DNA-PNA chimeric macromolecules
JOURNAL Patent: US 5700922-A 2 23-DEC-1997;
FEATURES
source
  Location/Qualifiers
    1..17
    /organism='unknown'
    /mol_type='unassigned DNA'

Query Match
Best Local Similarity 3.1%; Score 13.8; DB 1; Length 17;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 102 TTCTCGTGACTTTTCAG 118
    |||||
Db 1 TTCTCGTGCAATTTTCAG 17

RESULT 237
AR196361
LOCUS AR196361 17 bp DNA linear PAT 20-APR-2002
DEFINITION Sequence 826 from patent US 6350934.
ACCESSION AR196361
VERSION AR196361.1 GI:20245798
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE
AUTHORS 1 (bases 1 to 17)
TITLE Zwick, M.G., Edington, B.E., McSwiggen, J.A., Merlo, P. Ann. Owens.,
JOURNAL Guo, L., Skokut, T.A., Young, S.A., Folkerts, O. and Merlo, D.J.
Nucleic acid encoding delta-9 desaturase
PATENT: US 6350934-A 826 26-FEB-2002;
FEATURES
source
  Location/Qualifiers
    1..17
    /organism='unknown'
    /mol_type='unassigned DNA'

Query Match
Best Local Similarity 3.1%; Score 13.8; DB 1; Length 17;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 106 CGCTGACCTTCAGCGGG 122
    |||||
Db 1 CGCTGCCTTCAGCTGG 17

Location/Qualifiers
FT source 1..17
/organism='Sus scrofa (pig)'.

FEATURES
source
  Location/Qualifiers
    1..17
    /organism='Sus scrofa'
    /mol_type='genomic DNA'
    /db_xref='taxon:9823'

Query Match
Best Local Similarity 3.1%; Score 13.8; DB 1; Length 17;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 5 TCGCGAGGTGGGCTG 21
    |||||
Db 1 TCGCGAGGGGGACCTG 17

RESULT 238
AX028311
LOCUS AX028311 17 bp DNA linear PAT 16-SEP-2000
DEFINITION Sequence 130 from Patent WO0036143.
ACCESSION AX028311
VERSION AX028311.1 GI:10189199
KEYWORDS
SOURCE Sus scrofa (pig)
ORGANISM Sus scrofa
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.

REFERENCE
AUTHORS 1
TITLE Georges, M., Spincemalle, G. and Andersson, L.
JOURNAL Selecting animals for parentally imprinted traits
Patent: WO 0036143-A 130 22-JUN-2000;
SEGHERSGENTEC N V (BE); GEORGES MICHEL (BE); UNIV LIEGE (BE);
SPINCEMAILLE GEERT (BE); MELICA HB (SE); ANDERSSON LEIF (SE)
FEATURES
source
  Location/Qualifiers
    1..17
    /organism='Sus scrofa'
    /mol_type='unassigned DNA'
    /db_xref='taxon:9823'
    /note='Polymorphism Tyrosine Hydroxylase gene'

Query Match
Best Local Similarity 3.1%; Score 13.8; DB 1; Length 17;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 5 TCGCGAGGTGGGCTG 21
    |||||
Db 1 TCGCGAGGGGGACCTG 17

RESULT 239
AX272560/c
LOCUS AX272560 17 bp RNA linear PAT 29-OCT-2001
DEFINITION Sequence 129 from Patent WO0162911.
ACCESSION AX272560
VERSION AX272560.1 GI:16545297
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE
AUTHORS 1
TITLE Jarvis, T., von Carlowitz, I., McSwiggen, J.A., Hamblin, P.A. and
JOURNAL Ellis, J.H.
Method and reagent for the inhibition of grid
PATENT: WO 0162911-A 129 30-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); GLAXO GROUP LIMITED (GB)
FEATURES
source
  Location/Qualifiers
    1..17
    /organism='Homo sapiens'
    /mol_type='unassigned RNA'
    /db_xref='taxon:9606'

Query Match
Best Local Similarity 3.1%; Score 13.8; DB 1; Length 17;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 201 CTCCTGGGACCTGCGG 217
    |||||
Db 17 CTCCTGGGACCTCGG 1

RESULT 240
AX272761/c
LOCUS AX272761 17 bp RNA linear PAT 29-OCT-2001
DEFINITION Sequence 330 from Patent WO0162911.
ACCESSION AX272761
VERSION AX272761.1 GI:16545498
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KEYWORDS      Homo sapiens (human)
SOURCE        Homo sapiens
ORGANISM      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
              Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE     1
AUTHORS      Jarvis, T., von Carlowitz, I., Mcswiggen, J.A., Hamblin, P.A. and
              Ellis, J.H.
TITLE        Method and reagent for the inhibition of grid
JOURNAL      Patent: WO 0162911-A 330 30-AUG-2001;
              RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)
FEATURES
  source      1. .17
              /organism="Homo sapiens"
              /mol_type="unassigned RNA"
              /db_xref="taxon:9606"

  Query Match      3.1%; Score 13.8; DB 1; Length 17;
  Best Local Similarity 88.2%; Pred. No. 2.4e+02;
  Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 200 CCTCCCGGGACCTGCG 216
      ||||| ||||| |||
Db 17 CCTCCTGGGACCTCCG 1

RESULT 241
AX423613/c      3.1%; Score 13.8; DB 1; Length 17;
LOCUS          AX423613      17 bp      RNA      linear      PAT 18-JUN-2002
DEFINITION     Sequence 1949 from Patent WO0188124.
ACCESSION      AX423613
VERSION        AX423613.1 GI:21526995
KEYWORDS
SOURCE        Homo sapiens (human)
ORGANISM      Homo sapiens
              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
              Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE     1
AUTHORS      Jarvis, T., von Carlowitz, I., Mcswiggen, J.A., McLaughlin, F.G. and
              Randi, A.M.
TITLE        Method and reagent for the inhibition of erg
JOURNAL      Patent: WO 0188124-A 1949 22-NOV-2001;
              RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)
FEATURES
  source      1. .17
              /organism="Homo sapiens"
              /mol_type="unassigned RNA"
              /db_xref="taxon:9606"

  Query Match      3.1%; Score 13.8; DB 1; Length 17;
  Best Local Similarity 88.2%; Pred. No. 2.4e+02;
  Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 124 GGAAAAGCCTCGGCGTG 140
      ||||| ||||| |||
Db 17 GGAAAAGCCTCGGCAG 1

RESULT 242
AX429297      3.1%; Score 13.8; DB 1; Length 17;
LOCUS          AX429297      17 bp      DNA      linear      PAT 21-JUN-2002
DEFINITION     Sequence 2 from Patent EP1201676.
ACCESSION      AX429297
VERSION        AX429297.1 GI:21540603
KEYWORDS
SOURCE        Homo sapiens (human)
              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
              Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Muridae; Mus.
REFERENCE     1
AUTHORS      Cook, P.D.
TITLE        Pna-dna-pna chimeric macromolecules
JOURNAL      Patent: EP 1201676-A 2 02-MAY-2002;
              ISIS PHARMACEUTICALS, INC. (US)

KEYWORDS      Homo sapiens (human)
SOURCE        Homo sapiens
ORGANISM      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
              Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE     1
AUTHORS      Jarvis, T., von Carlowitz, I., Mcswiggen, J.A., Hamblin, P.A. and
              Ellis, J.H.
TITLE        Method and reagent for the inhibition of grid
JOURNAL      Patent: WO 0162911-A 330 30-AUG-2001;
              RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)
FEATURES
  source      1. .17
              /organism="Homo sapiens"
              /mol_type="unassigned RNA"
              /db_xref="taxon:9606"

  Query Match      3.1%; Score 13.8; DB 1; Length 17;
  Best Local Similarity 88.2%; Pred. No. 2.4e+02;
  Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 102 TTCTCGCTGACTTTCAG 118
      ||||| ||||| |||||
Db 1 TTCTCGCTGCATTTCAG 17

RESULT 243
AX688082      3.1%; Score 13.8; DB 1; Length 17;
LOCUS          AX688082      17 bp      DNA      linear      PAT 31-MAR-2003
DEFINITION     Sequence 814 from Patent EP1281758.
ACCESSION      AX688082
VERSION        AX688082.1 GI:29410780
KEYWORDS
SOURCE        Homo sapiens (human)
              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
              Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE     1
AUTHORS      Shannon, M., Gu, Y. and Nguyen, C.T.
TITLE        Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and
              mdz12
JOURNAL      Patent: EP 1281758-A 814 05-FEB-2003;
              Aescmica, Inc. (US)
FEATURES
  source      1. .17
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  Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 24 AGGGGTGGTGGCCATT 40
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Db 1 AGGGGTGGGGCCATT 17

RESULT 244
AX728175/c      3.1%; Score 13.8; DB 1; Length 17;
LOCUS          AX728175      17 bp      DNA      linear      PAT 08-MAY-2003
DEFINITION     Sequence 5862 from Patent WO03025176.
ACCESSION      AX728175
VERSION        AX728175.1 GI:30507518
KEYWORDS
SOURCE        Mus musculus (house mouse)
              Mus musculus
              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
              Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE     1
AUTHORS      Telesman, A., Anson, R. and Tuijinder, M.
TITLE        Sequences involved in phenomena of tumour suppression, tumour
              reversion, apoptosis and/or virus resistance and their use as
              medicines
JOURNAL      Patent: WO 03025176-A 5862 27-MAR-2003;
              Molecular Engines Laboratories (FR)
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LOCUS AR264867 17 bp DNA linear PAT 10-APR-2003  
DEFINITION Sequence 12 from patent US 6492115.  
ACCESSION AR264867  
VERSION AR264867.1 GI:29693236  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 17)  
AUTHORS Guida,M. and Hall,J.  
TITLE Genetic typing of the human cytochrome P450 2A6 gene and related materials and methods  
JOURNAL Patent: US 6492115-A 12 10-DEC-2002;  
FEATURES  
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Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.6e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 41 TTGTCTCAACCTAA 55  
Db 3 TTGTCTCACCTAA 17  
RESULT 250  
AR327157 17 bp RNA linear PAT 17-AUG-2003  
LOCUS AR327157  
DEFINITION Sequence 4559 from patent US 6566127.  
ACCESSION AR327157  
VERSION AR327157.1 GI:33712965  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 17)  
AUTHORS Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.  
TITLE Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor  
JOURNAL Patent: US 6566127-A 4559 20-MAY-2003;  
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Qy 164 AGCAACACAAAAATG 178  
Db 2 AGCAAGCAAAAAATG 16  
RESULT 251  
AX272860/c 17 bp RNA linear PAT 29-OCT-2001  
LOCUS AX272860  
DEFINITION Sequence 429 from Patent WO0162911.  
ACCESSION AX272860  
VERSION AX272860.1 GI:16545597  
KEYWORDS  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
REFERENCE 1  
AUTHORS Jarvis,T., von Carlowitz,I., Mcswiggen,J.A., Hamblin,P.A. and Ellis,J.H.  
TITLE Method and reagent for the inhibition of grid  
JOURNAL Patent: WO 0162911-A 429 30-AUG-2001;  
RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)

LOCUS AR264867 17 bp DNA linear PAT 10-APR-2003  
DEFINITION Sequence 12 from patent US 6492115.  
ACCESSION AR264867  
VERSION AR264867.1 GI:29693236  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 17)  
AUTHORS Guida,M. and Hall,J.  
TITLE Genetic typing of the human cytochrome P450 2A6 gene and related materials and methods  
JOURNAL Patent: US 6492115-A 12 10-DEC-2002;  
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Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 41 TTGTCTCAACCTAA 55  
Db 3 TTGTCTCACCTAA 17  
RESULT 250  
AR327157 17 bp RNA linear PAT 17-AUG-2003  
LOCUS AR327157  
DEFINITION Sequence 4559 from patent US 6566127.  
ACCESSION AR327157  
VERSION AR327157.1 GI:33712965  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 17)  
AUTHORS Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.  
TITLE Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor  
JOURNAL Patent: US 6566127-A 4559 20-MAY-2003;  
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Qy 164 AGCAACACAAAAATG 178  
Db 2 AGCAAGCAAAAAATG 16  
RESULT 251  
AX272860/c 17 bp RNA linear PAT 29-OCT-2001  
LOCUS AX272860  
DEFINITION Sequence 429 from Patent WO0162911.  
ACCESSION AX272860  
VERSION AX272860.1 GI:16545597  
KEYWORDS  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
REFERENCE 1  
AUTHORS Jarvis,T., von Carlowitz,I., Mcswiggen,J.A., Hamblin,P.A. and Ellis,J.H.  
TITLE Method and reagent for the inhibition of grid  
JOURNAL Patent: WO 0162911-A 429 30-AUG-2001;  
RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)

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Qy 132 CTCGGCCTGCCGCT 146  
Db 16 CTCGCCCTGCCGCT 2  
RESULT 252  
AX273288/c 17 bp RNA linear PAT 29-OCT-2001  
LOCUS AX273288  
DEFINITION Sequence 857 from Patent WO0162911.  
ACCESSION AX273288  
VERSION AX273288.1 GI:16546025  
KEYWORDS  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
REFERENCE 1  
AUTHORS Jarvis,T., von Carlowitz,I., Mcswiggen,J.A., Hamblin,P.A. and Ellis,J.H.  
TITLE Method and reagent for the inhibition of grid  
JOURNAL Patent: WO 0162911-A 857 30-AUG-2001;  
RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)  
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Qy 132 CTCGGCCTGCCGCT 146  
Db 15 CTCGCCCTGCCGCT 1  
RESULT 253  
AX423145/c 17 bp RNA linear PAT 18-JUN-2002  
LOCUS AX423145  
DEFINITION Sequence 1481 from Patent WO0188124.  
ACCESSION AX423145  
VERSION AX423145.1 GI:21526527  
KEYWORDS  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
REFERENCE 1  
AUTHORS Jarvis,T., von Carlowitz,I., Mcswiggen,J.A., McLaughlin,F.G. and Randi,A.M.  
TITLE Method and reagent for the inhibition of erg  
JOURNAL Patent: WO 0188124-A 1481 22-NOV-2001;  
RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)  
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Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.6e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 124 GGAAGAGCTCGGCC 138  
Db 16 GGAAGAGCTCGGCC 2

RESULT 254  
AX735544/c  
LOCUS Homo sapiens  
DEFINITION Sequence 1134 from Patent WO03025177.  
ACCESSION AX735544  
VERSION AX735544.1 GI:30514821  
KEYWORDS  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
REFERENCE 1  
AUTHORS Telerman,A., Anson,R. and Tuijinder,M.  
TITLE Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments  
JOURNAL Patent: WO 03025177-A 1134 27-MAR-2003;  
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QY 97 TGTTCCTCGCTCA 111  
Db 17 TGTTCCTCGCTCA 3

RESULT 255  
AR381406/c  
LOCUS Homo sapiens  
DEFINITION Sequence 2 from patent US 6608036.  
ACCESSION AR381406  
VERSION AR381406.1 GI:40089439  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 13)  
AUTHORS Gryaznov,S., Pongracz,K. and Matray,T.  
TITLE Oligonucleotide N3', fwardw.P5', thiophosphoramidates: their synthesis and administration to treat neoplasms  
JOURNAL Patent: US 6608036-A 2 19-AUG-2003;  
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source Location/Qualifiers  
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Query Match 2.9%; Score 13; DB 1; Length 13;  
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Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGTCACCCCTA 54  
Db 13 TTGTCACCCCTA 1

RESULT 256  
AR381412/c  
LOCUS Homo sapiens  
DEFINITION Sequence 8 from patent US 6608036.  
ACCESSION AR381412

VERSION AR381412.1 GI:40089445  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 13)  
AUTHORS Gryaznov,S., Pongracz,K. and Matray,T.  
TITLE Oligonucleotide N3', fwardw.P5', thiophosphoramidates: their synthesis and administration to treat neoplasms  
JOURNAL Patent: US 6608036-A 8 19-AUG-2003;  
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QY 46 CTAACCCCTAACTG 58  
Db 13 CTAACCCCTAACTG 1

RESULT 257  
AX786941/c  
LOCUS Homo sapiens  
DEFINITION Sequence 3 from Patent WO03002077.  
ACCESSION AX786941  
VERSION AX786941.1 GI:32954227  
KEYWORDS  
SOURCE unidentified  
ORGANISM unidentified  
unclassified.  
REFERENCE 1  
AUTHORS Styczynski,P. and Ahluwalia,G.S.  
TITLE Reduction of hair growth  
JOURNAL Patent: WO 03002077-A 3 09-JAN-2003;  
THE GILLETTE COMPANY (US)  
FEATURES  
source Location/Qualifiers  
1. .13  
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Query Match 2.9%; Score 13; DB 1; Length 13;  
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QY 46 CTAACCCCTAACTG 58  
Db 13 CTAACCCCTAACTG 1

RESULT 258  
BD071035/c  
LOCUS Homo sapiens  
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.  
ACCESSION BD071035  
VERSION BD071035.1 GI:22616638  
KEYWORDS JP 2001517929-A/1.  
SOURCE unidentified  
ORGANISM unidentified  
unclassified.  
REFERENCE 1 (bases 1 to 13)  
AUTHORS Shay,J.W., Wright,W.E., Piatyszek,M.A., Corey,D. and Norton,J.C.  
TITLE Modulation of mammalian telomerase by peptide nucleic acids  
JOURNAL Patent: JP 2001517929-A 1 09-OCT-2001;  
GERON CORP  
COMMENT OS Unidentified  
PN JP 2001517929-A/1  
PD 09-OCT-2001

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PF 09-APR-1997 JP 1997536487
PR 09-APR-1996 US 08/630019
PI JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID
COREY,
PI JAMES C NORTON
PC C07K14/00, A61K38/16, C12Q1/68
CC Strandedness: Single;
CC Topology: Linear;
CC /desc = 'peptide nucleic acid (PNA), where (deoxy(ribose- CC
phosphate
linkages are replaced by N-(2-aminoethyl)glycine units linked
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CC nucleotide bases via glycine amino N through a CC
methylenecarbonyl linker'
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Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCTAACTG 58
DB 13 CTAACCTAACTG 1

RESULT 259
BD071038/c
LOCUS 13 bp DNA linear PAT 27-AUG-2002
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION BD071038
VERSION BD071038.1 GI:22616641
KEYWORDS JP 2001517929-A/4.
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1 (bases 1 to 13)
AUTHORS Shay, J.W., Wright, W.E., Piatyszek, M.A., Corey, D. and Norton, J.C.
TITLE Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL Patent: JP 2001517929-A 4 09-OCT-2001;
GERON CORP
COMMENT OS Unidentified
PN JP 2001517929-A/4
PD 09-OCT-2001
PF 09-APR-1997 JP 1997536487
PR 09-APR-1996 US 08/630019
PI JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID
COREY,
PI JAMES C NORTON
PC C07K14/00, A61K38/16, C12Q1/68
CC Strandedness: Single;
CC Topology: Linear;
CC /desc = 'peptide nucleic acid (PNA), where (deoxy(ribose- CC
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linkages are replaced by N-(2-aminoethyl)glycine units linked
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methylenecarbonyl linker'
FH Key Location/Qualifiers
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Query Match 2.9%; Score 13; DB 1; Length 13;
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QY 46 CTAACCTAACTG 58
DB 13 CTAACCTAACTG 1

RESULT 259
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LOCUS 13 bp DNA linear PAT 27-AUG-2002
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION BD071038
VERSION BD071038.1 GI:22616641
KEYWORDS JP 2001517929-A/4.
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1 (bases 1 to 13)
AUTHORS Shay, J.W., Wright, W.E., Piatyszek, M.A., Corey, D. and Norton, J.C.
TITLE Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL Patent: JP 2001517929-A 4 09-OCT-2001;
GERON CORP
COMMENT OS Unidentified
PN JP 2001517929-A/4
PD 09-OCT-2001
PF 09-APR-1997 JP 1997536487
PR 09-APR-1996 US 08/630019
PI JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID
COREY,
PI JAMES C NORTON
PC C07K14/00, A61K38/16, C12Q1/68
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CC Topology: Linear;
CC /desc = 'peptide nucleic acid (PNA), where (deoxy(ribose- CC
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linkages are replaced by N-(2-aminoethyl)glycine units linked
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CC nucleotide bases via glycine amino N through a CC
methylenecarbonyl linker'
FH Key Location/Qualifiers
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Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGCTAACCCCTA 54
DB 13 TTGCTAACCCCTA 1

RESULT 260
BD071046/c
LOCUS 13 bp DNA linear PAT 27-AUG-2002
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION BD071046
VERSION BD071046.1 GI:22616649
KEYWORDS JP 2001517929-A/12.
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1 (bases 1 to 13)
AUTHORS Shay, J.W., Wright, W.E., Piatyszek, M.A., Corey, D. and Norton, J.C.
TITLE Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL Patent: JP 2001517929-A 12 09-OCT-2001;
GERON CORP
COMMENT OS Unidentified
PN JP 2001517929-A/12
PD 09-OCT-2001
PF 09-APR-1997 JP 1997536487
PR 09-APR-1996 US 08/630019
PI JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID
COREY,
PI JAMES C NORTON
PC C07K14/00, A61K38/16, C12Q1/68
CC Strandedness: Single;
CC Topology: Linear;
CC /desc = 'peptide nucleic acid (PNA), where (deoxy(ribose- CC
phosphate
linkages are replaced by N-(2-aminoethyl)glycine units linked
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methylenecarbonyl linker'
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Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 44 GTCTAACCCCTAAC 56
DB 13 GTCTAACCCCTAAC 1

RESULT 261
BD071079/c
LOCUS 13 bp DNA linear PAT 27-AUG-2002
DEFINITION Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION BD071079
VERSION BD071079.1 GI:22616682
KEYWORDS JP 2001517929-A/45.
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1 (bases 1 to 13)
AUTHORS Shay, J.W., Wright, W.E., Piatyszek, M.A., Corey, D. and Norton, J.C.
TITLE Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL Patent: JP 2001517929-A 45 09-OCT-2001;

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COMMENT      OS      Unidentified
              PN      JP 2001517929-A/54
              PD      09-OCT-2001
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              PI      JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID
              PI      COREY, JAMES C NORTON
              PI      JAMES C NORTON
              PC      C07K14/00, A61K38/16, C12Q1/68
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                    CC      nucleotide bases via glycine amino N through a CC
                    CC      methylenecarbonyl linker'
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Query Match      2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      53 TAACTGAGAGGG 65
Db      13 TAACTGAGAGGG 1

RESULT 265
BD071089/c
LOCUS      BD071089      13 bp      DNA      linear      PAT 27-AUG-2002
DEFINITION      Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION      BD071089
VERSION      BD071089.1 GI:22616692
KEYWORDS      JP 2001517929-A/55.
SOURCE      unidentified
ORGANISM      unidentified
REFERENCE      1 (bases 1 to 13)
AUTHORS      Shay, J.W., Wright, W.E., Piatyszek, M.A., Corey, D. and Norton, J.C.
TITLE      Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL      Patent: JP 2001517929-A 55 09-OCT-2001;
              GERON CORP

COMMENT      OS      Unidentified
              PN      JP 2001517929-A/55
              PD      09-OCT-2001
              PF      09-APR-1997 JP 1997536487
              PR      09-APR-1996 US 08/630019
              PI      JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID
              PI      COREY, JAMES C NORTON
              PI      JAMES C NORTON
              PC      C07K14/00, A61K38/16, C12Q1/68
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                    CC      nucleotide bases via glycine amino N through a CC
                    CC      methylenecarbonyl linker'
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Query Match      2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      53 TAACTGAGAGGG 65
Db      13 TAACTGAGAGGG 1

RESULT 265
BD071089/c
LOCUS      BD071089      13 bp      DNA      linear      PAT 27-AUG-2002
DEFINITION      Modulation of mammalian telomerase by peptide nucleic acids.
ACCESSION      BD071089
VERSION      BD071089.1 GI:22616692
KEYWORDS      JP 2001517929-A/55.
SOURCE      unidentified
ORGANISM      unidentified
REFERENCE      1 (bases 1 to 13)
AUTHORS      Shay, J.W., Wright, W.E., Piatyszek, M.A., Corey, D. and Norton, J.C.
TITLE      Modulation of mammalian telomerase by peptide nucleic acids
JOURNAL      Patent: JP 2001517929-A 55 09-OCT-2001;
              GERON CORP

COMMENT      OS      Unidentified
              PN      JP 2001517929-A/55
              PD      09-OCT-2001
              PF      09-APR-1997 JP 1997536487
              PR      09-APR-1996 US 08/630019
              PI      JERRY W SHAY, WOODRING E WRIGHT, MIECZYSLAW A PIATYSZEK, DAVID
              PI      COREY, JAMES C NORTON
              PI      JAMES C NORTON
              PC      C07K14/00, A61K38/16, C12Q1/68
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              CC      Topology: Linear;
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                    phosphate
                    linkages are replaced by N-(2-aminoethyl)glycine units linked
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                    CC      nucleotide bases via glycine amino N through a CC
                    CC      methylenecarbonyl linker'
              FH      Key      Location/Qualifiers
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Query Match      2.9%; Score 13; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      268 GGGGCTTCTCCGG 280
Db      4 GGGGCTTCTCCGG 16

RESULT 267
BD253907/c
LOCUS      BD253907      17 bp      DNA      linear      PAT 17-JUL-2003
DEFINITION      Regulation of repressor genes using nucleic acid molecules.
ACCESSION      BD253907
VERSION      BD253907.1 GI:33063677
KEYWORDS      JP 2002541795-A/1700.
SOURCE      unidentified
ORGANISM      unidentified
REFERENCE      1 (bases 1 to 17)
AUTHORS      Blatt, L., Zwick, M., Pavco, P. and McSwiggen, J.
TITLE      Regulation of repressor genes using nucleic acid molecules
JOURNAL      Patent: JP 2002541795-A 1700 10-DEC-2002;
              RIBOZYME PHARMACEUTICALS INC

COMMENT      OS      Eukaryote
              PN      JP 2002541795-A/1700
              PD      10-DEC-2002
              PF      11-APR-2000 JP 2000611654
              PR      12-APR-1999 US 60/129390
              PI      LAWRENCE BLATT, MICHAEL ZWICK, PAMELA PAVCO, JAMES MCSWIGGEN PC
              PI      C12N15/09, A61K38/00, A61P43/00, A61P43/00, C12N5/10, PC
              PI      C12P21/02,
              PC      C12P21/02, C12P21/02, (C12N5/10, C12R1:91), (C12P21/02, PC
                    C12R1:91),
                    PC      (C12P21/02, C12R1:91), (C12P21/02, C12N15/00, C12N5/00,
                    PC      A61K37/02,
                    PC      (C12N5/00, C12R1:91)
                    CC      Regulation of repressor genes using nucleic acid molecules FH
                    Key      Location/Qualifiers

Query Match      2.9%; Score 13; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 2.6e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      268 GGGGCTTCTCCGG 280
Db      4 GGGGCTTCTCCGG 16

RESULT 267
BD253907/c
LOCUS      BD253907      17 bp      DNA      linear      PAT 17-JUL-2003
DEFINITION      Regulation of repressor genes using nucleic acid molecules.
ACCESSION      BD253907
VERSION      BD253907.1 GI:33063677
KEYWORDS      JP 2002541795-A/1700.
SOURCE      unidentified
ORGANISM      unidentified
REFERENCE      1 (bases 1 to 17)
AUTHORS      Blatt, L., Zwick, M., Pavco, P. and McSwiggen, J.
TITLE      Regulation of repressor genes using nucleic acid molecules
JOURNAL      Patent: JP 2002541795-A 1700 10-DEC-2002;
              RIBOZYME PHARMACEUTICALS INC

COMMENT      OS      Eukaryote
              PN      JP 2002541795-A/1700
              PD      10-DEC-2002
              PF      11-APR-2000 JP 2000611654
              PR      12-APR-1999 US 60/129390
              PI      LAWRENCE BLATT, MICHAEL ZWICK, PAMELA PAVCO, JAMES MCSWIGGEN PC
              PI      C12N15/09, A61K38/00, A61P43/00, A61P43/00, C12N5/10, PC
              PI      C12P21/02,
              PC      C12P21/02, C12P21/02, (C12N5/10, C12R1:91), (C12P21/02, PC
                    C12R1:91),
                    PC      (C12P21/02, C12R1:91), (C12P21/02, C12N15/00, C12N5/00,
                    PC      A61K37/02,
                    PC      (C12N5/00, C12R1:91)
                    CC      Regulation of repressor genes using nucleic acid molecules FH
                    Key      Location/Qualifiers

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	Matches	13;	Conservative	0; Mismatches 0; Indels 0; Gaps 0;
	Qy	2	GGTTGGCGGGGT 14	
	Db	16	GGTTGGCGGGGT 4	
RESULT 268	BD266444			
	LOCUS	BD266444	16 bp	DNA linear PAT 17-JUL-2003
	DEFINITION	Universal arrays.		
	ACCESSION	BD266444		
KEYWORDS	VERSION	BD266444.1	GI:33076212	
	KEYWORDS	JP 2002539849-A/444.		
	SOURCE	synthetic construct		
	ORGANISM	other sequences; artificial sequences.		
REFERENCE	1	(bases 1 to 16)		
	AUTHORS	Fan, J.B., Hirschhorn, J.N., Huang, X., Kaplan, P., Lander, E.S., Lockhart, D.J., Ryder, T. and Sklar, P.		
	TITLE	Universal arrays		
	JOURNAL	Patent: JP 2002539849-A 444 26-NOV-2002;		
COMMENT	WHITEHEAD INSTITUTE FOR BIOMEDICAL RESEARCH, AFFYMETRIX INC			
	OS	Artificial Sequence		
	PN	JP 2002539849-A/444		
	PD	26-NOV-2002		
PI	PR	26-MAR-1999 US	60/126473, 23-JUN-1999 US	60/140359 PI
	JTAN	BING FAN, JOEL N HIRSCHORN, XIAOHUA HUANG, PAUL KAPLAN, ERIC		
	PI	S LANDER,		
	PI	DAVID J LOCKHART, THOMAS RYDER, PAMELA SKLAR		
PC	C12Q1/69, C12M1/00, C12N15/09, C12N15/09, C12N15/09, G01N33/53, PC			
	G01N33/566,			
	PC	G01N37/00, C12N15/00, C12N15/00, C12N15/00		
	CC	Primer		
FT	Key			
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	FT			/organism='Artificial Sequence'.
	FT			
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		/organism="synthetic construct"		
		/mol_type="genomic DNA"		
		/db_xref="taxon:32630"		
Query Match	Best Local Similarity	2.8%;	Score 12.8; DB 1; Length 16;	
	Matches	14;	Conservative	0; Mismatches 2; Indels 0; Gaps 0;
	Qy	24	AGGGTGGTGGCCATT 39	
	Db	1	AGGGTGGTGGCCATT 16	
RESULT 269	A82083			
	LOCUS	A82083	17 bp	DNA linear PAT 21-JAN-2000
	DEFINITION	Sequence 3 from Patent EP0887423.		
	ACCESSION	A82083		
KEYWORDS	VERSION	A82083.1	GI:6731948	
	KEYWORDS			
	SOURCE	unidentified		
	ORGANISM	unidentified		
unclassified.	1	(bases 1 to 17)		
	Blasczyk, R.D.			
	A	method for determining the Histocompatibility locus antigen class		
	II			
JOURNAL	Patent: EP 0887423-A 3	30-DEC-1998;		
	BIOTEST AG (DE)			
	Location/Qualifiers			
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FEATURES source	/organism="unidentified"			
	/mol_type="unassigned DNA"			
	/db_xref="taxon:32644"			
Query Match	Best Local Similarity	2.8%;	Score 12.8; DB 1; Length 17;	
	Matches	14;	Conservative	0; Mismatches 2; Indels 0; Gaps 0;
	Qy	232	AGCCCCCGAACCCGC 247	
	Db	1	AGCGCCCGCACCCGC 16	
RESULT 270	BD258356			
	LOCUS	BD258356	17 bp	DNA linear PAT 17-JUL-2003
	DEFINITION	Regulation of repressor genes using nucleic acid molecules.		
	ACCESSION	BD258356		
KEYWORDS	VERSION	BD258356.1	GI:33068126	
	KEYWORDS	JP 2002541795-A/6149.		
	SOURCE	unidentified		
	ORGANISM	unclassified.		
REFERENCE	1	(bases 1 to 17)		
	AUTHORS	Blatt, L., Zwick, M., Pavco, P. and Mcswiggen, J.		
	TITLE	Regulation of repressor genes using nucleic acid molecules		
	JOURNAL	Patent: JP 2002541795-A 6149 10-DEC-2002;		
COMMENT	RIBOZYME PHARMACEUTICALS INC			
	OS	Eukaryote		
	PN	JP 2002541795-A/6149		
	PD	10-DEC-2002		
PR	PR	11-APR-2000 JP	2000611654	
	PR	12-APR-1999 US	60/129390	
	PI	LAWRENCE BLATT, MICHAEL ZWICK, PAMELA PAVCO, JAMES MCSWIGGEN		
	PC	C12N15/09, A61K38/00, A61K48/00, A61P43/00, A61P43/00, C12N5/10, PC		
C12P21/02,	PC			
	C12P21/02, C12P21/02//A61K31/711, (C12N5/10, C12R1:91), (C12P21/02, C12R1:91),			
	PC	(C12P21/02, C12R1:91),		
	PC	A61K37/02, C12R1:91		
CC	CC	Regulation of repressor genes using nucleic acid molecules		
	Key	Location/Qualifiers		
	FT	source	1. .17	/organism='Eukaryote'.
	FT			
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		/organism="unidentified"		
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		/db_xref="taxon:32644"		
Query Match	Best Local Similarity	2.8%;	Score 12.8; DB 1; Length 17;	
	Matches	14;	Conservative	0; Mismatches 2; Indels 0; Gaps 0;
	Qy	97	TGTTTTCTCGCTGAC 112	
	Db	2	TTTTTTCTCTCGAC 17	
RESULT 271	BD273168			
	LOCUS	BD273168	17 bp	DNA linear PAT 17-JUL-2003



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KEYWORDS      .
SOURCE         synthetic construct
ORGANISM       other sequences; artificial sequences.
REFERENCE      1
AUTHORS        Blatt, L., McSwiggen, J. and Chowrira, B.M.
TITLE          Method and reagent for the modulation and diagnosis of cd20 and
              nogo gene expression
JOURNAL        Patent: WO 0159103-A 27 16-AUG-2001;
              RIBOZYME PHARMACEUTICALS, INC. (US) ; Blatt, Lawrence (US) ;
              McSwiggen, James (US) ; Chowrira, Bharat M. (US)
FEATURES       Location/Qualifiers
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               /db_xref="taxon:32630"
               /note="Nucleic Acid"

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 253 GCCGCGCGTCCGCCCG 268
Db 16 GCCGCGGACAGCCCG 1

RESULT 276
AX214616/c
LOCUS          AX214616          17 bp      RNA          linear          PAT 07-SEP-2001
DEFINITION     Sequence 58 from Patent WO0159103.
ACCESSION      AX214616
VERSION        AX214616.1 GI:15524659
KEYWORDS       .
SOURCE         synthetic construct
ORGANISM       other sequences; artificial sequences.
REFERENCE      1
AUTHORS        Blatt, L., McSwiggen, J. and Chowrira, B.M.
TITLE          Method and reagent for the modulation and diagnosis of cd20 and
              nogo gene expression
JOURNAL        Patent: WO 0159103-A 58 16-AUG-2001;
              RIBOZYME PHARMACEUTICALS, INC. (US) ; Blatt, Lawrence (US) ;
              McSwiggen, James (US) ; Chowrira, Bharat M. (US)
FEATURES       Location/Qualifiers
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               /organism="synthetic construct"
               /mol_type="unassigned RNA"
               /db_xref="taxon:32630"
               /note="Nucleic Acid"

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 363 GCCGCGAGAGAGAA 378
Db 17 GCAGCAGGAGAGCAA 2

RESULT 277
AX214617/c
LOCUS          AX214617          17 bp      RNA          linear          PAT 07-SEP-2001
DEFINITION     Sequence 59 from Patent WO0159103.
ACCESSION      AX214617
VERSION        AX214617.1 GI:15524660
KEYWORDS       .
SOURCE         synthetic construct
ORGANISM       other sequences; artificial sequences.
REFERENCE      1
AUTHORS        Blatt, L., McSwiggen, J. and Chowrira, B.M.
TITLE          Method and reagent for the modulation and diagnosis of cd20 and
              nogo gene expression
JOURNAL        Patent: WO 0159103-A 59 16-AUG-2001;
              RIBOZYME PHARMACEUTICALS, INC. (US) ; Blatt, Lawrence (US) ;
              McSwiggen, James (US) ; Chowrira, Bharat M. (US)
FEATURES       Location/Qualifiers
               1..17
               /organism="synthetic construct"
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               /db_xref="taxon:32630"
               /note="Nucleic Acid"

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 254 GCCGCGGTCCGCCCG 269
Db 17 GCCGCGGACAGCCCG 2

RESULT 279
AX226635/c
LOCUS          AX226635          17 bp      RNA          linear          PAT 10-SEP-2001
DEFINITION     Sequence 7 from Patent WO0157206.
ACCESSION      AX226635
VERSION        AX226635.1 GI:15555776
KEYWORDS       .
SOURCE         synthetic construct
ORGANISM       other sequences; artificial sequences.
REFERENCE      1
AUTHORS        Fattaey, A.R., Jarvis, T., McSwiggen, J., Boher, R.N. and Holman, P.S.
TITLE          Method and reagent for the inhibition of checkpoint kinase-1 (chk
              1) enzyme
JOURNAL        Patent: WO 0157206-A 7 09-AUG-2001;
              RIBOZYME PHARMACEUTICALS, INC. (US) ; Fattaey, Ali R. (US)
FEATURES       Location/Qualifiers
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/db_xref="taxon:32630"

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 272 CTTCTCCGGAGGCACC 287
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Db 17 CTTCTCATAGGCACC 2

RESULT 280
AX272762/c AX272762 17 bp RNA linear PAT 29-OCT-2001
LOCUS Sequence 331 from Patent WO0162911.
DEFINITION AX272762
ACCESSION AX272762
VERSION AX272762.1 GI:16545499
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
1 Jarvis, T., von Carlowitz, I., Mcswiggen, J.A., Hamblin, P.A. and
  Ellis, J.H.
  Method and reagent for the inhibition of grid
  Patent: WO 0162911-A 331 30-AUG-2001;
  RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)
  Location/Qualifiers
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Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 200 CCTCCCGGGACCTGC 215
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Db 16 CCTCCCTGGACCTCC 1

RESULT 281
AX324613 AX324613 17 bp DNA linear PAT 02-SEP-2002
LOCUS Sequence 751 from Patent WO0192512.
DEFINITION AX324613
ACCESSION AX324613
VERSION AX324613.1 GI:18095366
KEYWORDS
SOURCE Zea mays
ORGANISM Zea mays
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
clade; Panicoideae; Andropogoneae; Zea.
REFERENCE
1 Kmiec, E.B., Gamper, H.B., Rice, M.C. and Kim, J.
  Targeted chromosomal genomic alterations in plants using modified
  single stranded oligonucleotides
  Patent: WO 0192512-A 751 06-DEC-2001;
  UNIVERSITY OF DELAWARE (US)
  Location/Qualifiers
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Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 410 CTGAGCTGTGGACGT 425
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Db 17 CTGAGCTGTGGACGT 2

RESULT 282
AX324614/c AX324614 17 bp DNA linear PAT 02-SEP-2002
LOCUS Sequence 752 from Patent WO0192512.
DEFINITION AX324614
ACCESSION AX324614
VERSION AX324614.1 GI:18095367
KEYWORDS
SOURCE Zea mays
ORGANISM Zea mays
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
clade; Panicoideae; Andropogoneae; Zea.
REFERENCE
1 Kmiec, E.B., Gamper, H.B., Rice, M.C. and Kim, J.
  Targeted chromosomal genomic alterations in plants using modified
  single stranded oligonucleotides
  Patent: WO 0192512-A 752 06-DEC-2001;
  UNIVERSITY OF DELAWARE (US)
  Location/Qualifiers
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Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 7 CGGAGGGTGGGCGCTGG 22
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Db 17 CGGAGGGTGGGCGCTGG 2

RESULT 284
AX422503/c AX422503 17 bp RNA linear PAT 18-JUN-2002
LOCUS Sequence 839 from Patent WO0188124.
DEFINITION AX422503
ACCESSION AX422503
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VERSION      AX422503.1  GI:21525885
KEYWORDS
SOURCE       Homo sapiens (human)
ORGANISM     Homo sapiens
             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
             Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE
AUTHORS      Jarvis,T., von Carlowitz,I., Mcwigen,J.A., McLaughlin,F.G. and
             Randi,A.M.
TITLE        Method and reagent for the inhibition of erg
JOURNAL      Patent: WO 0188124-A 839 22-NOV-2001;
             RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)

FEATURES
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/organism="Homo sapiens"
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Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      7  CGGAGGGTGGGCGCTGG 22
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Db      16  CGGGGGGTGGGGCTGG 1

RESULT 285
AX531206
LOCUS      AX531206
DEFINITION Sequence 715 from Patent EP1239051.
ACCESSION AX531206
VERSION    AX531206.1  GI:25254205
KEYWORDS
SOURCE     Homo sapiens (human)
ORGANISM   Homo sapiens
             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
             Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE
AUTHORS      Shannon,M.
TITLE        Human posh-like protein 1
JOURNAL      Patent: EP 1239051-A 715 11-SEP-2002;
             Aeomica, Inc. (US)

FEATURES
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/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      272  CTTCTCCGAGGCACC 287
        ||| ||||| |||||
Db      2  CTTCTCCGAGACAGC 17

RESULT 286
AX531207
LOCUS      AX531207
DEFINITION Sequence 716 from Patent EP1239051.
ACCESSION AX531207
VERSION    AX531207.1  GI:25254207
KEYWORDS
SOURCE     Homo sapiens (human)
ORGANISM   Homo sapiens
             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
             Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE
AUTHORS      Shannon,M.
TITLE        Human posh-like protein 1
JOURNAL      Patent: EP 1239051-A 716 11-SEP-2002;

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FEATURES
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/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      272  CTTCTCCGAGGCACC 287
        ||| ||||| |||||
Db      1  CTTCTCCGAGACAGC 16

RESULT 287
AX545225/c
LOCUS      AX545225
DEFINITION Sequence 738 from Patent EP1243660.
ACCESSION AX545225
VERSION    AX545225.1  GI:25810436
KEYWORDS
SOURCE     Homo sapiens (human)
ORGANISM   Homo sapiens
             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
             Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE
AUTHORS      Zhang,J., Gu,Y. and Nguyen,C.T.
TITLE        Human udp-galnac:polyptide n-acetyl galatosaminyltransferase 10
JOURNAL      Patent: EP 1243660-A 738 25-SEP-2002;
             Aeomica, Inc. (US)

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Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      343  GCGAGGTTGAGGCCTT 358
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Db      17  GCGCGGATCAGGCCTT 2

RESULT 288
AX545226/c
LOCUS      AX545226
DEFINITION Sequence 739 from Patent EP1243660.
ACCESSION AX545226
VERSION    AX545226.1  GI:25810437
KEYWORDS
SOURCE     Homo sapiens (human)
ORGANISM   Homo sapiens
             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
             Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE
AUTHORS      Zhang,J., Gu,Y. and Nguyen,C.T.
TITLE        Human udp-galnac:polyptide n-acetyl galatosaminyltransferase 10
JOURNAL      Patent: EP 1243660-A 739 25-SEP-2002;
             Aeomica, Inc. (US)

FEATURES
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/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      343  GCGAGGTTGAGGCCTT 358
        ||| ||||| |||||
Db      17  GCGCGGATCAGGCCTT 2

RESULT 289
AX545226/c
LOCUS      AX545226
DEFINITION Sequence 739 from Patent EP1243660.
ACCESSION AX545226
VERSION    AX545226.1  GI:25810437
KEYWORDS
SOURCE     Homo sapiens (human)
ORGANISM   Homo sapiens
             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
             Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE
AUTHORS      Zhang,J., Gu,Y. and Nguyen,C.T.
TITLE        Human udp-galnac:polyptide n-acetyl galatosaminyltransferase 10
JOURNAL      Patent: EP 1243660-A 739 25-SEP-2002;
             Aeomica, Inc. (US)

FEATURES
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/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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Qy 343 GCGAGGTTGAGCCTT 358  
Db 16 GCGGGATCAGGCTT 1

RESULT 289  
AX688081  
LOCUS AX688081 17 bp DNA linear PAT 31-MAR-2003  
DEFINITION Sequence 813 from Patent EP1281758.  
ACCESSION AX688081  
VERSION AX688081.1 GI:29410779  
KEYWORDS  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
1  
Shannon,M., Gu,Y. and Nguyen,C.T.  
AUTHORS Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and  
TITLE mdz12  
JOURNAL Patent: EP 1281758-A 813 05-FEB-2003;  
Aeonica, Inc. (US)  
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Qy 24 AGGGGTGGGCCATT 39  
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RESULT 290  
AX688083  
LOCUS AX688083 17 bp DNA linear PAT 31-MAR-2003  
DEFINITION Sequence 815 from Patent EP1281758.  
ACCESSION AX688083  
VERSION AX688083.1 GI:29410781  
KEYWORDS  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
1  
Shannon,M., Gu,Y. and Nguyen,C.T.  
AUTHORS Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and  
TITLE mdz12  
JOURNAL Patent: EP 1281758-A 815 05-FEB-2003;  
Aeonica, Inc. (US)  
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Qy 25 GGGGTGGGCCATT 40  
Db 1 GGGGTGGGCCATT 16

RESULT 291  
BD104967  
LOCUS BD104967 17 bp DNA linear PAT 27-AUG-2002  
DEFINITION Kit and method for determining HLA type.

ACCESSION BD104967  
VERSION BD104967.1 GI:22650541  
KEYWORDS WO 0192572-A/1071.  
SOURCE synthetic construct  
ORGANISM synthetic construct  
other sequences: artificial sequences.  
REFERENCE  
1 (bases 1 to 17)  
AUTHORS Inoko,H., Kagiya,T., Ichihara,T., Matsumura,Y., Moriya,S. and  
Nishida,M.  
TITLE Kit and method for determining HLA type  
JOURNAL Patent: WO 0192572-A 1071 06-DEC-2001;  
NISSHINBO INDUSTRIES INC.SYSTEM RESEARCH INC.HIDETOSHI INOKO, TAEKO  
KAGIYA, TATSUO ICHIHARA, YOSHIYUKI MATSUMURA, SHOGO MORIYA, MICHIO  
NISHIDA  
COMMENT OS Artificial Sequence  
PN WO 0192572-A/1071  
PD 06-DEC-2001  
PF 01-JUN-2001 WO 2001JP004662  
PR 01-JUN-2000 JP 00P 164798  
PI HIDETOSHI INOKO, TAEKO KAGIYA, TATSUO ICHIHARA, YOSHIYUKI PI  
MATSUMURA,  
FI SHOGO MORIYA, MICHIO NISHIDA  
PC C12Q1/68, C12M1/00, C12N15/09, G01N33/53  
CC Description of Artificial Sequence:capture  
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RESULT 292  
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LOCUS BD225841 25 bp DNA linear PAT 17-JUL-2003  
DEFINITION Promoter region of mouse and human telomerase RNA component genes.  
ACCESSION BD225841  
VERSION BD225841.1 GI:33035611  
KEYWORDS JP 2002509699-A/44.  
SOURCE synthetic construct  
ORGANISM synthetic construct  
other sequences: artificial sequences.  
REFERENCE  
1 (bases 1 to 25)  
AUTHORS Keith,W.N.  
TITLE Promoter region of mouse and human telomerase RNA component genes  
JOURNAL Patent: JP 200309699-A 44 02-APR-2002;  
CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD  
COMMENT OS Artificial Sequence  
PN JP 2002509699-A/44  
PD 02-APR-2002  
PF 29-JAN-1999 JP 2000529424  
PR 29-JAN-1998 GB 9801902.9  
PI WILLIAM NICOL KEITH  
PC C12N15/09, A61K31/7105, A61K31/711, A61K35/76, A61K38/00, A61K45/00, PC  
A61K48/00,  
PC A61P35/00, C12N1/15, C12N1/19, C12N1/21, C12N5/10, C12P21/02 PC  
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PC (A61K35/76, A61K31:522), C12N15/00, A61K37/02, C12N5/00 CC  
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ACCESSION			
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SOURCE			
ORGANISM			
REFERENCE			
AUTHORS			
TITLE			
JOURNAL			
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Matches		17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;	
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LOCUS		Method for detecting and inhibiting RNA component of telomerase.									
DEFINITION		BD023698									
ACCESSION		BD023698									
VERSION		JP 2001507229-A/2.									
KEYWORDS		unidentified									
SOURCE		unclassified.									
ORGANISM		1 (bases 1 to 30)									
REFERENCE		Kim,N.W., Wu,P., Kealey,J.T., Pruzan,R. and Weinrich,S.L.									
AUTHORS		Method for detecting and inhibiting RNA component of telomerase									
TITLE		Patent: JP 2001507229-A 2 05-JUN-2001;									
JOURNAL		GERON CORP									
COMMENT		PN JP 2001507229-A/2									
		PD 05-JUN-2001									
		PF 19-DEC-1997 JP 1998529003									
		PR 20-DEC-1996 US 08/770564,20-DEC-1996 US 08/770565 PI									
		NAM WOO KIM,FRED WU,JAMES T KEALEY,RONALD PRUZAN,SCOTT L PI									
		WEINRICH									
		PC C12N15/09,A61K9/08,A61K31/7105,A61K45/00,A61K48/00,A61P35/00,									
		PC C12N5/10,									
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LOCUS											
DEFINITION											
ACCESSION											
VERSION											
KEYWORDS											
SOURCE											
ORGANISM											
REFERENCE											
AUTHORS											
TITLE											
JOURNAL											
COMMENT											
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Keith,W.N.											
Promoter region of mouse and human telomerase RNA component genes											
Patent: JP 2002509699-A 42 02-APR-2002;											
CANCER RESEARCH CAMPAIGN TECHNOLOGY LTD											
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PN JP 2002509699-A/42											
PD 02-APR-2002											
PF 29-JAN-1999 JP 2000529424											
PR 29-JAN-1998 GB 9801902.9											
PI WILLIAM NICOL KEITH											
PC											
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A61K48/00,											
PC A61P35/00,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12P21/02 PC											
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Description of Artificial Sequence:Oligonucleotide FH Key											





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LOCUS AX637286 4425 from Patent EP1260586. 15 bp RNA linear PAT 21-FEB-2003
DEFINITION Sequence 4425 from Patent EP1260586.
ACCESSION AX637286
VERSION AX637286.1 GI:28472900
KEYWORDS
SOURCE unidentified
ORGANISM unclassified.
REFERENCE
1
AUTHORS Stinchcomb,D.T., Dudycz,L.W., Chowrira,B., Grimm,S., Drenzo,A.,
Karpeisky,A., Draper,K.G., Kieich,K., Matulic-Adamic,J.,
McSwiggen,J.A., Modak,A., Pavco,P., Beigelman,L., Sullivan,S.M.,
Sweedler,D., Thompson,J.D., Tracz,D., Usman,N., Wincott,F.E. and
Woolf,T.
TITLE Method and reagent for inhibiting the expression of disease related
genes
JOURNAL Patent: EP 1260586-A 4425 27-NOV-2002;
RIBOZYME PHARMACEUTICALS, INC. (US)
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Qy 302 AGATTGGCTCTG 315
Db 15 AGATTGGACTCTG 2
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AJ840863
LOCUS AJ840863 15 bp DNA linear PLN 22-SEP-2004
DEFINITION Arabidopsis thaliana T-DNA flanking sequence, right border, clone
615B02.
ACCESSION AJ840863.1 GI:52545069
VERSION AJ840863.1
KEYWORDS Right border; T-DNA flanking sequence.
SOURCE Arabidopsis thaliana (Chale cress)
ORGANISM Arabidopsis thaliana
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; Core eudicots;
Rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
REFERENCE
1
AUTHORS Brunaud,V., Balzergue,S., Dubreucq,B., Aubourg,S., Samson,F.,
Chauvin,S., Bechtold,N., Cruaud,C., Derose,R., Pelletier,G.,
Lepiniec,L., Caboche,M. and Lecharny,A.
TITLE T-DNA integration into the Arabidopsis genome depends on sequences
of pre-insertion sites
JOURNAL EMBO Rep. 3 (12), 1152-1157 (2002)
MEDLINE 22363535
PUBMED 1246565
REFERENCE
2 (bases 1 to 15)
AUTHORS Balzergue,S.
JOURNAL Direct Submission
COMMENT Submitted (21-SEP-2004) Balzergue S., UMRGV, INRA/CNRS, 2 rue
Gaston Cremieux, 91057 Evry cedex, FRANCE
PCR was performed on DNA from transformants of Arabidopsis thaliana
plants from INRA (Versailles). The DNA fragment(s) resulting from
the PCR were directly sequenced from the left or the right border
to determine the genomic sequence flanking the insertion. T-DNA
derived sequences were removed. Information to order the
corresponding mutant line and a link to a database providing a
graphical display of the insertion site are available at
http://dbgap.versailles.inra.fr/publiclines/. This sequence has
been generated in the framework of the French plant genomics
program 'Genoplante' (http://www.genoplante.com and
http://genoplante-info.infobiogen.fr).

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Qy 30 GGTGGCCATTTT 43
Db 2 GCGCGCCATTTT 15
RESULT 307
CQ786904/c
LOCUS CQ786904 16 bp DNA linear PAT 24-MAR-2004
DEFINITION Sequence 81 from Patent WO2004021010.
ACCESSION CQ786904
VERSION CQ786904.1 GI:45721896
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE
1
AUTHORS Nakamura,Y. and Furukawa,Y.
TITLE Method of diagnosing colon and gastric cancers
JOURNAL Patent: WO 2004021010-A 81 11-MAR-2004;
Oncotherapy Science, Inc. (JP); Japan as represented by the
president of the university of Tokyo (JP)
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Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 394 CGCGCGCGCGATT 407
Db 15 CGCGCGCGCGAGT 2
RESULT 308
AR228137/c
LOCUS AR228137 16 bp DNA linear PAT 20-DEC-2002
DEFINITION Sequence 38 from patent US 6448003.
ACCESSION AR228137
VERSION AR228137.1 GI:27266883
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE
1 (bases 1 to 16)
AUTHORS Guida,M. and Kurth,J.
TITLE Genotyping the human phenol sulfotransferase 2 gene STP2
JOURNAL Patent: US 6448003-A 38 10-SEP-2002;
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Db 14 AGGGGTGGTGGCTA 1

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LOCUS AX327120 16 bp DNA linear PAT 07-JAN-2002  
DEFINITION Sequence 316 from Patent WO0178894.  
ACCESSION AX327120  
VERSION AX327120.1 GI:18097831  
KEYWORDS  
SOURCE synthetic construct  
ORGANISM synthetic construct  
other sequences; artificial sequences.

REFERENCE 1  
AUTHORS Keith, T.  
TITLE Novel human gene relating to respiratory diseases, obesity, and  
inflammatory bowel disease  
JOURNAL Patent: WO 0178894-A 316 25-OCT-2001;  
Genome Therapeutics Corp. (US)  
FEATURES  
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Search completed: August 24, 2005, 14:20:29  
Job time : 3 secs



GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 14:24:45 ; Search time 2 Seconds  
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Title: US-09-436-060A-16

Perfect score: 451

Sequence: 1 ggggtcgagggtggcct.....aggactgggtcacacatgc 451

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Searched: 479 seqs, 9339 residues

Total number of hits satisfying chosen parameters: 958

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Post-processing: Minimum Match 0%

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Listing first 488 summaries

Database : rng.subdb.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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4	54	12.0	66	1	AAA08204 Adenovirus nucleot
5	54	12.0	66	1	AAH24815 Human nucleic acid
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8	39.6	8.8	47	1	AAZ00337 Mutated hTR promot
9	39.6	8.8	47	1	AAZ00336 Mutated hTR promot
10	36.4	8.1	47	1	AAZ00339 Mutated hTR promot
11	36	8.0	38	1	AAZ07296 Human telomerase R
12	31.2	6.9	38	1	AAZ07298 Human telomerase R
13	31.2	6.9	38	1	AAZ07297 Human telomerase R
14	31	6.9	31	1	AAV63645 Antisense Oligonuc
15	31	6.9	31	1	AAA37591 Telomerase target
16	31	6.9	31	1	AAA15462 Human telomerase R
17	31	6.9	31	1	AS019472 Antisense oligonuc
18	31	6.9	31	1	ASX10982 Human telomerase a
19	31	6.9	31	1	ADC35648 Human telomerase R
20	31	6.9	31	1	ADG62870 Human telomerase R
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22	30	6.7	30	1	AAAT10298 RNA component of h
23	30	6.7	30	1	AAV63648 Antisense oligonuc
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25	30	6.7	30	1	AAV41175 RNA component of h
26	30	6.7	30	1	AAV41172 RNA component of h
27	30	6.7	30	1	AAZ23627 Human clone 28-1 t
28	30	6.7	30	1	AAZ23630 Human clone 28-1 t
29	30	6.7	30	1	AAZ23631 Human clone 28-1 t
30	30	6.7	30	1	AAAS15928 Human telomerase p
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32	30	6.7	30	1	AAAS09475 Antisense oligonuc
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Human telomerase a	30	6.7	30	1	ABX10985
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Human telomerase R	28	6.2	28	1	AAV63647
RNA component of h	27	6.0	27	1	AAV41172
PCR primer hTR445	27	6.0	27	1	AAV41173
Human telomerase R	27	6.0	27	1	ABA95497
Human telomerase R	30	5.9	30	1	AAZ07264
RNA component of h	26	5.8	26	1	AAAT10309
Primer for product	26	5.8	26	1	AAAT1044
RNA component of h	26	5.8	26	1	AAAT10304
RNA component of h	26	5.8	26	1	AAAT10299
RNA component of h	26	5.8	26	1	AAAT10306
Human telomerase p	26	5.8	26	1	AAV58811
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Human telomerase R	26	5.8	26	1	ADG82592
Human telomerase R	25	5.5	25	1	AAZ07280
Telomerase RNA tar	25	5.5	25	1	AAA37582
Human telomerase R	25	5.5	25	1	AAV15453
Human telomerase P	25	5.5	25	1	AAV15453
RNA component of h	25	5.5	25	1	AAV15453
DNA oligonucleotid	24	5.4	24	1	AAV41169
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Human telomerase R	24	5.3	24	1	AAV58807
Human telomerase R	24	5.3	24	1	AAV68465
Human telomerase R	24	5.3	24	1	AAV68464
Human telomerase R	24	5.3	24	1	AAZ07273
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Human telomerase R	24	5.3	24	1	AAZ07279
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DNA oligonucleotid	23	5.1	23	1	AAV92246
PNA sequence #26 u	23	5.1	23	1	AAA37568
Oligonucleotide #2	23	5.1	23	1	AAA15446
Human TERC mRNA tr	23	5.1	23	1	ADQ3794
Human TERC mRNA tr	23	5.1	23	1	ADQ3794
Human TERC mRNA tr	23	5.1	23	1	ADQ3795
Human TERC mRNA tr	23	5.1	23	1	ADQ3793
Human TERC mRNA tr	23	5.1	23	1	ADQ3792
Human TERC mRNA tr	23	5.1	23	1	ADQ3804
Human TERC mRNA tr	23	5.1	23	1	ADQ3801
hTR siNA-target RN	23	5.1	23	1	ADG29526
hTR siNA-target RN	23	5.1	23	1	ADG29519
hTR siNA-target RN	23	5.1	23	1	ADG29525

107	23	5.1	23	1	ADG29521	hTR siNA-target RN	c 180	19	4.2	19	1	ADFP93564	Human TERC siNA lo
108	23	5.1	23	1	ADG29524	hTR siNA-target RN	181	19	4.2	19	1	ADFP93294	Human TERC transcr
109	23	5.1	23	1	ADG29520	hTR siNA-target RN	182	19	4.2	19	1	ADFP93299	Human TERC transcr
110	23	5.1	23	1	ADG29522	hTR siNA-target RN	183	19	4.2	19	1	ADFP93300	Human TERC transcr
111	23	5.1	23	1	ADP27908	PCR primer to ampl	184	19	4.2	19	1	ADFP93306	Human TERC transcr
112	23	5.1	25	1	AAZ07300	Human telomerase R	185	19	4.2	19	1	ADFP93314	Human TERC transcr
113	23	5.1	27	1	AAT11045	Primer used for pr	c 186	19	4.2	19	1	ADFP93563	Human TERC siNA lo
114	22	4.9	22	1	AAT11033	Antisense oligonuc	187	19	4.2	19	1	ADFP93304	Human TERC transcr
115	22	4.9	22	1	AAT11034	Antisense oligonuc	c 188	19	4.2	19	1	ADFP93549	Human TERC siNA lo
116	22	4.9	22	1	AAT10288	RNA component of m	c 189	19	4.2	19	1	ADFP93567	Human TERC siNA lo
117	22	4.9	22	1	AAT10287	RNA component of m	c 190	19	4.2	19	1	ADFP93301	Human TERC transcr
118	22	4.9	22	1	AAT10308	RNA component of m	c 191	19	4.2	19	1	ADFP93553	Human TERC siNA lo
119	22	4.9	22	1	AAT58812	Human telomerase P	c 192	19	4.2	19	1	ADFP93568	Human TERC siNA lo
120	22	4.9	22	1	AAV63646	Antisense oligonuc	c 193	19	4.2	19	1	ADFP93305	Human TERC transcr
121	22	4.9	22	1	AAV63628	Human clone 28-1 t	c 194	19	4.2	19	1	ADFP93547	Human TERC siNA lo
122	22	4.9	22	1	AAS09473	Antisense oligonuc	c 195	19	4.2	19	1	ADFP93548	Human TERC siNA lo
123	22	4.9	22	1	ACC57544	Telomerase PCR pri	c 196	19	4.2	19	1	ADFP93550	Human TERC siNA lo
124	22	4.9	22	1	ACC57543	Telomerase PCR pri	c 197	19	4.2	19	1	ADFP93555	Human TERC siNA lo
125	22	4.9	22	1	ABX10983	Human telomerase a	c 198	19	4.2	19	1	ADFP93556	Human TERC siNA lo
126	22	4.9	22	1	ADC35649	Human telomerase R	c 199	19	4.2	19	1	ADFP93291	Human TERC transcr
127	22	4.9	22	1	ADG62871	Human telomerase R	c 200	19	4.2	19	1	ADFP93302	Human TERC transcr
128	22	4.9	22	1	ACC58032	Telomerase PCR pri	201	19	4.2	19	1	ADFP93390	Human TERC transcr
129	22	4.9	22	1	ACC58031	Telomerase PCR pri	202	19	4.2	19	1	ADFP93295	Human TERC transcr
130	21	4.7	21	1	AAT11058	Primer used for am	c 203	19	4.2	19	1	ADFP93545	Human TERC siNA lo
131	21	4.7	21	1	AAT110301	RNA component of n	c 204	19	4.2	19	1	ADFP93558	Human TERC siNA lo
132	21	4.7	21	1	AAT58813	Human telomerase P	c 205	19	4.2	19	1	ADFP93561	Human TERC siNA lo
133	21	4.7	21	1	ADFP93862	Human TERC siRNA,	206	19	4.2	19	1	ADFP93297	Human TERC transcr
134	21	4.7	21	1	ADFP93867	Human TERC siRNA,	207	19	4.2	19	1	ADFP93309	Human TERC transcr
135	21	4.7	21	1	ADFP93860	Human TERC siRNA,	208	19	4.2	19	1	ADFP93310	Human TERC transcr
136	21	4.7	21	1	ADFP93864	Human TERC siRNA,	209	19	4.2	19	1	ADFP93292	Human TERC transcr
137	21	4.7	21	1	ADFP93866	Human TERC siRNA,	210	19	4.2	19	1	ADFP93298	Human TERC transcr
138	21	4.7	21	1	ADFP93859	Human TERC siRNA,	211	19	4.2	19	1	ADFP93311	Human TERC transcr
139	21	4.7	21	1	ADFP93861	Human TERC siRNA,	212	19	4.2	19	1	ADFP93313	Human TERC transcr
140	21	4.7	21	1	ADFP93865	Human TERC siRNA,	c 213	19	4.2	19	1	ADFP93557	Human TERC siNA lo
141	21	4.7	21	1	ADG30031	hTR-targeted siNA	c 214	19	4.2	19	1	ADFP93365	Human TERC siNA lo
142	21	4.7	21	1	ADG30028	hTR-targeted siNA	c 215	19	4.2	19	1	ADFP93551	Human TERC siNA lo
143	21	4.7	21	1	ADG30030	hTR-targeted siNA	216	19	4.2	19	1	ADFP93293	Human TERC transcr
144	21	4.7	21	1	ADG30036	hTR-targeted siNA	c 217	19	4.2	19	1	ADFP93546	Human TERC siNA lo
145	21	4.7	21	1	ADG30035	hTR-targeted siNA	c 218	19	4.2	19	1	ADFP93562	Human TERC siNA lo
146	21	4.7	21	1	ADG30029	hTR-targeted siNA	219	19	4.2	19	1	ADFP93308	Human TERC transcr
147	21	4.7	21	1	ADG30033	hTR-targeted siNA	c 220	19	4.2	19	1	ADFP93552	Human TERC siNA lo
148	21	4.7	21	1	ADG30034	hTR-targeted siNA	c 221	19	4.2	19	1	ADFP93566	Human TERC siNA lo
149	21	4.7	21	1	ADQ94244	Short hairpin RNA	222	19	4.2	19	1	ADFP93296	Human TERC transcr
150	21	4.7	21	1	ADQ94243	Short hairpin RNA	c 223	19	4.2	19	1	ADFP93544	Human TERC siNA lo
151	21	4.7	21	1	ADT86999	siRNA sequence use	c 224	19	4.2	19	1	ADFP93554	Human TERC siNA lo
152	20	4.4	20	1	AAT11035	Antisense oligonuc	c 225	19	4.2	19	1	ADFP93559	Human TERC siNA lo
153	20	4.4	20	1	AAT11032	Antisense oligonuc	226	19	4.2	19	1	ADO22919	Human telomerase R
154	20	4.4	20	1	AAT10286	RNA component of m	227	19	4.2	19	1	ADO23063	Human telomerase R
155	20	4.4	20	1	AAT10289	RNA component of m	228	19	4.2	19	1	ADO23064	Human telomerase R
156	20	4.4	20	1	AAV71226	Antisense oligonuc	229	19	4.2	19	1	ADO23062	Human telomerase R
157	20	4.4	20	1	AAV41173	RNA component of h	230	19	4.2	19	1	ADO23065	Human telomerase R
158	20	4.4	20	1	AAV41170	RNA component of h	231	19	4.2	19	1	ADP27906	PCR primer to ampl
159	20	4.4	20	1	AAV41174	RNA component of h	c 232	19	4.2	19	1	ADP27907	PCR primer to ampl
160	20	4.4	20	1	AAV41180	RNA component of h	c 233	19	4.2	19	1	ADP87877	2',5'-oligoadenyli
161	20	4.4	20	1	AAZ23632	Human clone 28-1 t	c 234	19	4.2	19	1	ADP87879	2',5'-oligoadenyli
162	20	4.4	20	1	AAZ23636	Human clone 28-1 t	c 235	19	4.2	19	1	ADP87880	2',5'-oligoadenyli
163	20	4.4	20	1	AAZ07301	Human telomerase R	c 236	19	4.2	19	1	ADP87874	2',5'-oligoadenyli
164	20	4.4	20	1	AAZ07275	Human telomerase R	c 237	19	4.2	20	1	AAV68470	Oligo contained ac
165	20	4.4	20	1	AAJ37583	PNA sequence #41 u	c 238	19	4.2	20	1	AAV68468	Oligo contained ac
166	20	4.4	20	1	AAJ54544	PNA VIII inhibiti	239	19	4.2	21	1	ACC57540	Short interfering
167	20	4.4	20	1	AAJ55934	Human telomerase p	240	19	4.2	21	1	ACC57539	Short interfering
168	20	4.4	20	1	AAJ59477	Antisense oligonuc	c 241	19	4.2	21	1	ADFP93815	Human TERC chemica
169	20	4.4	20	1	AAJ59480	Antisense oligonuc	c 242	19	4.2	21	1	ADFP93824	Human TERC chemica
170	20	4.4	20	1	AAJ64999	Human telomerase p	c 243	19	4.2	21	1	ADFP93831	Human TERC chemica
171	19	4.2	19	1	AAV68462	Human telomerase R	244	19	4.2	21	1	ADFP93812	Human TERC chemica
172	19	4.2	19	1	AAV41176	RNA component of h	c 245	19	4.2	21	1	ADFP93825	Human TERC chemica
173	19	4.2	19	1	AAJ37602	Telomerase target	c 246	19	4.2	21	1	ADFP93817	Human TERC chemica
174	19	4.2	19	1	AAJ39775	Nucleotide sequenc	c 247	19	4.2	21	1	ADFP93832	Human TERC chemica
175	19	4.2	19	1	AAJ54573	Human telomerase R	248	19	4.2	21	1	ADFP93811	Human TERC chemica
176	19	4.2	19	1	ADFP93303	Human TERC transcr	249	19	4.2	21	1	ADFP93813	Human TERC chemica
177	19	4.2	19	1	ADFP93307	Human TERC transcr	c 250	19	4.2	21	1	ADFP93833	Human TERC chemica
178	19	4.2	19	1	ADFP93332	Human TERC transcr	c 251	19	4.2	21	1	ADFP93816	Human TERC chemica
179	19	4.2	19	1	ADFP933560	Human TERC siNA lo	c 252	19	4.2	21	1	ADFP93823	Human TERC chemica

C 253	19	4.2	21	1	ADG30042	hTR-targeted siNA	C 326	14.4	3.2	19	1	AA47637	Forward primer, to
C 254	19	4.2	21	1	ADG30043	hTR-targeted siNA	C 327	14	3.1	17	1	AAF57369	Murine Cdc2A intr
C 255	19	4.2	21	1	ADG30044	hTR-targeted siNA	C 328	14	3.1	17	1	AA91135	Fungal pathogenic
C 256	19	4.2	21	1	ACC58028	Short interfering	C 329	13.8	3.1	17	1	AAV81598	Oligonucleotide us
C 257	19	4.2	21	1	ACC58027	Short interfering	C 330	13.8	3.1	17	1	AAV62951	Delta-9 desaturase
C 258	19	4.2	23	1	ADF93829	Human TERC chemica	C 331	13.8	3.1	17	1	ABL46697	Human GRID NCH rib
C 259	19	4.2	23	1	ADF93828	Human TERC chemica	C 332	13.8	3.1	17	1	ABL46496	Human GRID hammerh
C 260	19	4.2	23	1	ADF93827	Human TERC chemica	C 333	13.8	3.1	17	1	ABK19302	Human ERG Amberzym
C 261	19	4.2	23	1	ADF93819	Human TERC chemica	C 334	13.8	3.1	17	1	ADA99825	Human MD23 scannin
C 262	19	4.2	23	1	ADF93820	Human TERC chemica	C 335	13.8	3.1	17	1	ACD58382	HCV DNzyme subestr
C 263	19	4.2	23	1	ADF93821	Human TERC chemica	C 336	13.8	3.1	17	1	ACD63046	HCV minus strand D
C 264	19	4.2	23	1	ADF93822	hTR-targeted siNA	C 337	13.8	3.1	17	1	ACG68615	Murine oligonucleo
C 265	19	4.2	23	1	ADG30040	hTR-targeted siNA	C 338	13.8	3.1	17	1	ADL47097	Human NOGO recepto
C 266	19	4.2	23	1	ADG30038	hTR-targeted siNA	C 339	13.8	3.1	17	1	ADL51921	Human PTGDR subestr
C 267	18.8	4.2	22	1	AAZ07305	Human telomerase R	C 340	13.8	3.1	17	1	ADL48304	Human IKK-gamma su
C 268	18.4	4.1	20	1	AAZ07291	Mouse telomerase R	C 341	13.8	3.1	17	1	ADL48303	Human IKK-gamma su
C 269	18.4	4.1	20	1	AAZ07294	Mouse telomerase R	C 342	13.8	3.1	17	1	ADM53854	Human GRID mRNA su
C 270	18	4.0	18	1	AAAX18325	PCR primer for tel	C 343	13.8	3.1	17	1	ADM54055	Human GRID mRNA su
C 271	18	4.0	18	1	AAAS37552	PNA sequence #9 us	C 344	13.8	3.1	17	1	ADI85884	HCV DNzyme subestr
C 272	18	4.0	18	1	AAAS15430	PNA 27 inhibiting	C 345	13.8	3.1	18	1	AAAG2696	Granule bound star
C 273	17.2	3.8	22	1	AAZ07303	Human telomerase R	C 346	13.8	3.1	18	1	AAV35627	SHOX gene exon II
C 274	17	3.8	22	1	AAV41181	RNA component of h	C 347	13.8	3.1	18	1	ADL88552	Probe 52 used to d
C 275	16.4	3.6	20	1	ADK20555	Acyl-coenzyme A sy	C 348	13.8	3.1	18	1	ADMA2858	DNA oligo to conet
C 276	16.4	3.6	20	1	ADK20489	Acyl-coenzyme A sy	C 349	13.8	3.1	18	1	AAZ07296	Human telomerase R
C 277	16.4	3.6	20	1	ADK20636	Acyl-coenzyme A sy	C 350	13.4	3.0	17	1	ABL47224	Human GRID Amberzy
C 278	16.4	3.6	21	1	AAV27886	Human telomerase g	C 351	13.4	3.0	17	1	ABL46796	Human GRID NCH rib
C 279	16.2	3.6	21	1	AAQ43257	Sequence encoding	C 352	13.4	3.0	17	1	ABK18834	Human ERG DNzyme
C 280	16.2	3.6	21	1	AAQ43258	Sequence encoding	C 353	13.4	3.0	17	1	AAAL44028	Human cytochrome p
C 281	16.2	3.6	21	1	AAQ71457	Rx 2.4 prrolaxin	C 354	13.4	3.0	17	1	AAAL44029	Human cytochrome p
C 282	16.2	3.6	21	1	AAAX18326	PCR primer for tel	C 355	13.4	3.0	17	1	ACA07669	NFKB sub-unit modu
C 283	16	3.5	16	1	AAAT89247	DNA oligonucleotid	C 356	13.4	3.0	17	1	ABZ66556	Human HIV DNA zyme
C 284	16	3.5	16	1	AAAS37569	PNA sequence #27 u	C 357	13.4	3.0	17	1	ABZ66567	Human HIV amberzym
C 285	16	3.5	16	1	AAAS15447	Oligonucleotide #3	C 358	13.4	3.0	17	1	ACD64058	HCV minus strand D
C 286	16	3.5	20	1	AAZ07277	Human telomerase R	C 359	13.4	3.0	17	1	ACD58611	HCV DNzyme subestr
C 287	15.8	3.5	20	1	ADH56499	Human tumour endot	C 360	13.4	3.0	17	1	ADI48631	Human tumour suppr
C 288	15.8	3.5	20	1	ADH56566	Human hypotetical	C 361	13.4	3.0	17	1	ADM54545	Human GRID mRNA su
C 289	15.8	3.5	79	1	ADP27647	Human TERC DNA use	C 362	13.4	3.0	17	1	ADI86392	HCV DNzyme subestr
C 290	15.4	3.4	17	1	AAAT89233	Peptide nucleic ac	C 363	13	2.9	13	1	AAAT89228	Peptide nucleic ac
C 291	15.4	3.4	17	1	AAZ87074	PCR primer for hum	C 364	13	2.9	13	1	AAAT89236	Peptide nucleic ac
C 292	15.4	3.4	20	1	ADK20650	Acyl-coenzyme A sy	C 365	13	2.9	13	1	AAAT89225	Peptide nucleic ac
C 293	15.4	3.4	20	1	ADK20828	Acyl-coenzyme A sy	C 366	13	2.9	13	1	AAZ08815	Human RERF-LC-A1 h
C 294	15.2	3.4	20	1	AAAC67060	Rat/human Glutamat	C 367	13	2.9	13	1	AAA37544	PNA sequence #1 us
C 295	15.2	3.4	20	1	ADK21153	Acyl-coenzyme A sy	C 368	13	2.9	13	1	AAA37594	PNA sequence #52 u
C 296	15	3.3	15	1	AAAT89229	Peptide nucleic ac	C 369	13	2.9	13	1	AAA37598	PNA sequence #56 u
C 297	15	3.3	15	1	AAAT89248	DNA oligonucleotid	C 370	13	2.9	13	1	AAA37593	PNA sequence #51 u
C 298	15	3.3	15	1	AAAT89226	Peptide nucleic ac	C 371	13	2.9	13	1	AAA37588	Antisense sequence
C 299	15	3.3	15	1	AAV41177	RNA component of h	C 372	13	2.9	13	1	AAA37597	PNA sequence #55 u
C 300	15	3.3	15	1	AAAS37570	PNA sequence #28 u	C 373	13	2.9	13	1	AAA37555	PNA sequence #12 u
C 301	15	3.3	15	1	AAAS37587	Antisense sequence	C 374	13	2.9	13	1	AAA37547	PNA sequence #4 us
C 302	15	3.3	15	1	AAAS37545	PNA sequence #2 us	C 375	13	2.9	13	1	AAAS15468	PNA 12 inhibiting
C 303	15	3.3	15	1	AAAS37548	PNA sequence #5 us	C 376	13	2.9	13	1	AAAS15426	PNA 5/XII inhibiti
C 304	15	3.3	15	1	AAAS15427	PNA XIII inhibiti	C 377	13	2.9	13	1	AAAS15433	PNA 6/X inhibiting
C 305	15	3.3	15	1	AAAS15448	Oligonucleotide #4	C 378	13	2.9	13	1	AAAS15469	PNA 13 inhibiting
C 306	15	3.3	15	1	AAAS15424	PNA VII inhibiting	C 379	13	2.9	13	1	AAAS15465	PNA 3 inhibiting h
C 307	15	3.3	15	1	AAAS15458	Phosphorothioate (	C 380	13	2.9	13	1	AAAS15423	PNA 8/VI inhibiti
C 308	15	3.3	15	1	AAAS15927	Human telomerase p	C 381	13	2.9	13	1	AAAS15459	Phosphorothioate (
C 309	15	3.3	15	1	AAAS15931	Human telomerase p	C 382	13	2.9	13	1	AAAS15464	PNA 2 inhibiting h
C 310	15	3.3	15	1	AAAS15932	Human telomerase p	C 383	13	2.9	13	1	AAH26730	Phosphoramidate-li
C 311	15	3.3	15	1	ADP87875	2',5'-oligoadenyli	C 384	13	2.9	13	1	AAH26734	Phosphoramidate-li
C 312	15	3.3	15	1	ADP87878	2',5'-oligoadenyli	C 385	13	2.9	13	1	AAAS15937	Human telomerase p
C 313	15	3.3	18	1	AAV27891	Human telomerase a	C 386	13	2.9	13	1	AAAS15921	Human telomerase p
C 314	15	3.3	20	1	ADK201128	Acyl-coenzyme A sy	C 387	13	2.9	13	1	AAAS15926	Human telomerase p
C 315	15	3.3	20	1	ADK201144	Acyl-coenzyme A sy	C 388	13	2.9	13	1	AAAS15930	Human telomerase p
C 316	14.8	3.3	18	1	AAH82232	Influenza virus PA	C 389	13	2.9	13	1	AAAS15935	Human telomerase p
C 317	14.8	3.3	18	1	AAZ24498	H. capsulatum 5.8S	C 390	13	2.9	13	1	AAAS15922	Human telomerase p
C 318	14.6	3.2	18	1	AAZ23265	Japanese type C he	C 391	13	2.9	13	1	AAAS15923	Human telomerase p
C 319	14.4	3.2	16	1	ADD00949	Human Jagged 2 for	C 392	13	2.9	13	1	AAAS15925	Human telomerase p
C 320	14.4	3.2	16	1	ADH62909	Human Jagged 2 DNA	C 393	13	2.9	13	1	AAAS15924	Human telomerase p
C 321	14.4	3.2	16	1	ADH57064	PCR primer used to	C 394	13	2.9	13	1	AAAS15938	Human telomerase p
C 322	14.4	3.2	17	1	ACA06327	NFKB sub-unit modu	C 395	13	2.9	13	1	AAF81193	Thiophosphoramidat
C 323	14.4	3.2	17	1	ACA06326	NFKB sub-unit modu	C 396	13	2.9	13	1	AAF81195	Thiophosphoramidat
C 324	14.4	3.2	17	1	AD183554	HCV DNzyme subestr	C 397	13	2.9	13	1	AD50105	Oligonucleotide #1
C 325	14.4	3.2	18	1	AAA63120	Antisense oligonuc	C 398	13	2.9	13	1	ADB68045	Match phosphorothi

C 399	13	2.9	13	1	ADB68046	Match 2'-O-methyl	C 472	12.8	2.8	17	1	ADM58919	Hepatitis B virus
C 400	13	2.9	13	1	ABZ59497	Telomerase inhibit	473	12.8	2.8	17	1	AD183671	HCV DNzyme substr
C 401	13	2.9	13	1	ADM46660	Telomerase templat	C 474	12.8	2.8	17	1	AD186393	HCV DNzyme substr
C 402	13	2.9	13	1	ADO21607	Labelled nucleic a	475	12.8	2.8	17	1	AD184179	HCV DNzyme substr
C 403	13	2.9	13	1	ADO21606	Labelled nucleic a	C 476	12.8	2.8	17	1	AD186509	HCV DNzyme substr
C 404	13	2.9	13	1	ADS32750	Human G/C-rich (Sp	C 477	12.8	2.8	17	1	ADN44083	Mutant cell identi
C 405	13	2.9	14	1	AAV93815	Human B-raf target	478	12.8	2.8	17	1	ADN44082	Mutant cell identi
C 406	13	2.9	14	1	ADP87937	2',5'-oligoadenyl	C 479	12.8	2.8	17	1	ADQ80740	Porcine TSSC5 intr
C 407	13	2.9	15	1	AA598334	Galanin receptor g	C 480	12.8	2.8	17	1	ADQ92762	Androgen receptor
C 408	13	2.9	15	1	ABK97507	Human LCAT gene po	C 481	12.8	2.8	25	1	AA207300	Human telomerase R
C 409	13	2.9	15	1	ADG98425	Human CETP gene al	C 482	12.8	2.8	30	1	AAV41169	RNA component of h
C 410	13	2.9	16	1	AAAT14404	PRRSV sequencing p	C 483	12.8	2.8	38	1	AAZ07298	Human telomerase R
C 411	13	2.9	17	1	RAF01709	Hammerhead ribozym	484	12.8	2.8	62	1	AAA08205	Adenovirus nucleot
C 412	13	2.9	17	1	ABZ62076	Human H-Ras DNzyme	485	12.8	2.8	62	1	AAH24816	Human nucleic acid
C 413	12.8	2.9	16	1	AAT80369	Oligo HCV-222, mul	C 486	12.8	2.8	66	1	AAH08204	Adenovirus nucleot
C 414	12.8	2.8	16	1	RAC73638	Reverse primer #14	C 487	12.8	2.8	66	1	AAH24815	Human nucleic acid
C 415	12.8	2.8	16	1	ABS65953	Inhibitory oligonu	C 488	12.6	2.8	15	1	ADG98448	Human CETP gene al
C 416	12.8	2.8	16	1	ABT34275	Serotonin receptor							
C 417	12.8	2.8	16	1	ADN14388	Pyrimidine nucleot							
C 418	12.8	2.8	17	1	AAT12444	Antiviral phosphor							
C 419	12.8	2.8	17	1	AAT12443	Antiviral phosphor							
C 420	12.8	2.8	17	1	AA62953	Delta-9 desaturase							
C 421	12.8	2.8	17	1	AAV20570	Human BRCA1 probe							
C 422	12.8	2.8	17	1	AAV04779	Group-specific amp							
C 423	12.8	2.8	17	1	AAV00304	Human leukocyte an							
C 424	12.8	2.8	17	1	AAV55127	C/EBP-beta antisen							
C 425	12.8	2.8	17	1	AAA34574	Human adenosine re							
C 426	12.8	2.8	17	1	AAF20696	Human C/EBP polynu							
C 427	12.8	2.8	17	1	AAF06158	Hammerhead ribozym							
C 428	12.8	2.8	17	1	AAA70569	Shear Stress Respo							
C 429	12.8	2.8	17	1	AAH94582	Human Chk1 ribozym							
C 430	12.8	2.8	17	1	AAH95534	Human Chk1 ribozym							
C 431	12.8	2.8	17	1	ABK00059	Human NOGO Hammer							
C 432	12.8	2.8	17	1	ABK00027	Human NOGO Hammer							
C 433	12.8	2.8	17	1	ABK01810	Human NOGO Zinzyme							
C 434	12.8	2.8	17	1	ABK00058	Human NOGO Hammer							
C 435	12.8	2.8	17	1	ABL46698	Human GRID NCH rib							
C 436	12.8	2.8	17	1	ABV85745	Human PP-GaNTase 1							
C 437	12.8	2.8	17	1	ABV85746	Human PP-GaNTase 1							
C 438	12.8	2.8	17	1	ABK25391	Male-sterile plant							
C 439	12.8	2.8	17	1	ABK25392	Male-sterile plant							
C 440	12.8	2.8	17	1	ABK18192	Human ERG hammehe							
C 441	12.8	2.8	17	1	ABK18191	Human ERG hammehe							
C 442	12.8	2.8	17	1	ABV90003	Human POSHL1 scann							
C 443	12.8	2.8	17	1	ABV90002	Human POSHL1 scann							
C 444	12.8	2.8	17	1	ABL31582	Human HLA genotypi							
C 445	12.8	2.8	17	1	ACN09761	WNV minus strand I							
C 446	12.8	2.8	17	1	ACN04592	WNV Zinzyme substr							
C 447	12.8	2.8	17	1	ACN14999	WNV minus strand A							
C 448	12.8	2.8	17	1	ACN00415	WNV Hammerhead Rib							
C 449	12.8	2.8	17	1	ACN03272	WNV Inozyme substr							
C 450	12.8	2.8	17	1	ACN14010	WNV minus strand D							
C 451	12.8	2.8	17	1	ADA99826	Human MDZ3 scannin							
C 452	12.8	2.8	17	1	ADA99824	Human MDZ3 scannin							
C 453	12.8	2.8	17	1	ABZ62075	Human H-Ras DNzyme							
C 454	12.8	2.8	17	1	ABZ65412	Human HER2 DNzyme							
C 455	12.8	2.8	17	1	ABZ61267	Human H-Ras DNzyme							
C 456	12.8	2.8	17	1	ABZ64563	Human HER2 DNzyme							
C 457	12.8	2.8	17	1	ABZ61388	Human H-Ras DNzyme							
C 458	12.8	2.8	17	1	ACD59623	HCV DNzyme substr							
C 459	12.8	2.8	17	1	ACD54287	HCV minus strand D							
C 460	12.8	2.8	17	1	ACD64059	HCV inozyme substr							
C 461	12.8	2.8	17	1	ACD52324	HBV inozyme substr							
C 462	12.8	2.8	17	1	ADP13468	SNX9 (Sorting Nexi							
C 463	12.8	2.8	17	1	ABZ96390	Human C/EBP antise							
C 464	12.8	2.8	17	1	ADL48687	Human IKK-gamma su							
C 465	12.8	2.8	17	1	ADL51562	Human PTGDR substr							
C 466	12.8	2.8	17	1	ADL51527	Human PTGDR substr							
C 467	12.8	2.8	17	1	ADM09504	Human NOGO recepto							
C 468	12.8	2.8	17	1	ADL47866	Human IKK-gamma su							
C 469	12.8	2.8	17	1	ADM54056	Human GRID mRNA su							
C 470	12.8	2.8	17	1	ADN20299	Human C/EBP DNA f							
C 471	12.8	2.8	17	1	ADK13270	Human glioma endot							

## ALIGNMENTS

## RESULT 1

ADP27647

ID ADP27647 standard; DNA; 79 BP.

XX

AC ADP27647;

XX

DT 26-AUG-2004 (first entry)

XX

XX Human TERC DNA used as a cancer prognostic marker SeqID 84.

DE

XX

XX TERC; human; PCR amplicon; ds; prognostic marker; EGFR;

XX epidermal growth factor receptor; cancer; gene expression profiling;

KW microarray; head and neck cancer; colon cancer; metastatic spread;

KW neoplastic disease.

XX

XX Homo sapiens.

OS WO2004046386-A1.

PN

XX

XX 03-JUN-2004.

XX

XX 14-NOV-2003; 2003WO-US036777.

XX

XX 15-NOV-2002; 2002US-0427090P.

XX

XX (GENO-) GENOMIC HEALTH INC.

XX (VALL-) VALL HEBRON UNIV HOSPITAL.

XX

XX Baker JB, Cronin MT, Shak S, Baselga J;

XX WPI; 2004-420643/39.

XX

XX Claim 55; SEQ ID NO 84; 113pp; English.

XX

XX This invention relates to a novel method concerning prognostic markers

XX associated with EGFR (epidermal growth factor receptor) positive cancer.

XX Specifically, it refers to a gene expression profiling method that can

XX provide a prediction as to whether a patient is likely to respond well to

XX treatment with an EGFR inhibitor. The present invention describes the

XX quantitative analysis of the expression level of the RNA transcript of at

XX least one gene selected from the group of CD44v3, CD44v6, DR5, GRII,

XX KRT17, LAMC2 or their products thereof. It further provides a cDNA

XX microarray containing named genes that represent prognostic transcripts

XX which are useful for determining whether a patient diagnosed with an EGFR

XX -expressing head or neck cancer or colon cancer exhibits elevated or

XX decreased expression levels of these genes compared to normal. As such,

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QY 1 GGGTTGCGGAGGGTGGGCTGGGAGGGGTGGTGCCCAATTTTGTCTAACCCCTA 54
   |||||||
Db 61 GGGTTGCGGAGGGTGGGCTGGGAGGGGTGGTGCCCAATTTTGTCTAACCCCTA 8

RESULT 4
AAA08204
ID AAA08204 standard; DNA; 66 BP.
XX
AC AAA08204;
XX
DT 28-JUN-2000 (first entry)
XX
DE Adenovirus nucleotide sequence SEQ ID NO:19.
XX
KW Human; telomerase; hTR; telomeric repeat amplification protocol; TRAP;
KW identification; detection; quantification; cancer; metastasis; ss.
XX
OS Mastadenovirus.
XX
XX US6037126-A.
XX
XX 14-MAR-2000.
XX
XX 12-JUN-1997; 97US-00873709.
XX
XX 12-JUN-1997; 97US-00873709.
XX
PA (INVI-) INVITRO DIAGNOSTICS INC.
XX
XX Grossman A;
XX
XX WPI; 2000-282223/24.
XX
XX Pair of RNA molecules for detecting telomerase, useful for diagnosis of
PT cancer or metastases, can be ligated when bound to telomerase subunit
PT protein.
XX
XX Example 2; Col 23; 32pp; English.
XX
XX The present invention describes a pair of RNA molecules (R1, R2) for
CC detecting a first subunit protein (I) of telomerase. R1 and R2 both bind
CC to (I) and have formulae 5'-A-B-C-3' (R1) 5'-D-E-F-3' (R2) where: A and F
CC = RNA segment of 10 to 10000 nucleotides (nt) that together are
CC replicated by RNA replicase; B and E = RNA segments of 10 to 250 nt from
CC the Y region of human telomerase and bind specifically to (I); C and D =
CC RNA segments of 1 to 10000 nt which can be ligated together. Ligation of
CC C and D produces R3 of formula 5'-A-B-C-D-E-F-3' (R3) with E and B bound
CC to (I). Replication of R3 by RNA replicase indicates presence of (I).
CC Also described are: (1) method for detecting (I) using R1 and R2; (2) kit
CC for this process containing R1, R2, ligase and an amplification system;
CC and (3) method for making R1 and R2 by transcription from appropriate
CC DNA. R1 and R2 are used to detect and quantify telomerase, particularly
CC for diagnosis of cancer and for detection of metastases. R1 and R2
CC provide an assay that does not require expensive equipment or highly
CC trained personnel, and is suitable for automation. The present sequence
CC represents an oligonucleotide used in the exemplification of the present
CC invention
XX
SQ Sequence 66 BP; 10 A; 11 C; 28 G; 17 T; 0 U; 0 Other;

Query Match 12.0%; Score 54; DB 1; Length 66;
Best Local Similarity 100.0%; Pred. No. 0.77;
Matches 54; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GGGTTGCGGAGGGTGGGCTGGGAGGGGTGGTGCCCAATTTTGTCTAACCCCTA 54
   |||||||
Db 6 GGGTTGCGGAGGGTGGGCTGGGAGGGGTGGTGCCCAATTTTGTCTAACCCCTA 59

RESULT 5
AAH24815
ID AAH24815 standard; DNA; 51 BP.
XX
XX AAZ00334;
XX
XX 22-OCT-1999 (first entry)
XX
DE Mutated hTR promoter fragment containing construct 29111 (mRCE).
```

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ID AAH24815 standard; RNA; 66 BP.
XX
AC AAH24815;
XX
DT 06-AUG-2001 (first entry)
XX
DE Human nucleic acid sequence derived from Y-1 domain of telomerase.
XX
KW RNA-binding protein; RBP; RNA replicase; RNA identification; telomerase;
KW ss.
XX
XX Homo sapiens.
XX
XX US6238867-B1.
XX
XX 29-MAY-2001.
XX
XX 22-FEB-1999; 99US-00255464.
XX
XX 23-FEB-1998; 98US-0075495P.
XX
XX (INVI-) INVITRO DIAGNOSTICS INC.
XX
XX Roninson IB, Grossman A;
XX
XX WPI; 2001-366472/38.
XX
XX New ribonucleic acids useful for identifying naturally occurring RNA
PT sequences having affinity for RNA-binding protein having protein and RNA
PT components.
XX
XX Example 2; Col 26; 36pp; English.
XX
XX The specification describes a first RNA (RNA1) and a second RNA (RNA2)
CC for use in binding an RNA-binding protein (RBP) having protein and RNA
CC components. RNA1 has the formula 5'-A-B-C-3', where A is section having
CC 10-100,000 nucleotides and is can be received by an RNA replicase and
CC with another DNA sequence, F, being replicated; B is section having 10-
CC 3,000 nucleotides which have affinity to one consensus sequence of the
CC RBP and which can bind to the protein component; C is section having
CC about 1-20 nucleotides and which can be ligated to D of the second RNA
CC molecule. RNA2 has the formula 5'-D-E-F-3', where D is section having 1-
CC 20 nucleotides and which can be ligated to C; E is section 10-3,000
CC nucleotides which have affinity to second consensus sequence of the RBP
CC and which can bind to the protein component; F is section having 10-
CC 100,000 nucleotides which can be received by an RNA replicase and with A
CC being replicated. RNA1 and RNA2 are capable of forming a third RNA (RNA3)
CC of formula 5'-A-B-C-D-E-F-3'. The method is useful for the identification
CC and characterization of RNA sequences having specific affinity to amino
CC acid consensus sequences of RBPs, and to RNAs. AAH24815-16 were used to
CC produce a double-stranded RNA1, comprising the Y-1 domain of human
CC telomerase
XX
SQ Sequence 66 BP; 10 A; 11 C; 28 G; 17 T; 0 U; 0 Other;

Query Match 12.0%; Score 54; DB 1; Length 66;
Best Local Similarity 100.0%; Pred. No. 0.77;
Matches 54; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GGGTTGCGGAGGGTGGGCTGGGAGGGGTGGTGCCCAATTTTGTCTAACCCCTA 54
   |||||||
Db 6 GGGTTGCGGAGGGTGGGCTGGGAGGGGTGGTGCCCAATTTTGTCTAACCCCTA 59

RESULT 6
AAZ00334
ID AAZ00334 standard; DNA; 51 BP.
XX
XX AAZ00334;
XX
XX 22-OCT-1999 (first entry)
XX
DE Mutated hTR promoter fragment containing construct 29111 (mRCE).
```

```
XX Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;
KW gene therapy; thymidine kinase gene; anticancer therapy; human; ss.
OS Homo sapiens.
OS Synthetic.
XX WO9938964-A2.
PN 05-AUG-1999.
PD 29-JAN-1999; 99WO-GB000308.
XX 29-JAN-1999; 99WO-GB000308.
XX 29-JAN-1998; 98GB-00001902.
XX (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.
PA Keith WN;
PI WPI; 1999-479183/40.
DR Mouse and human telomerase RNA gene promoters, useful for tumor specific
XX gene therapy.
XX Disclosure; Fig 19; 109pp; English.
XX The invention relates to promoter regions from mouse and human telomerase
CC RNA (TR) component genes. The TR gene promoter can be linked to a
CC heterologous gene, especially a gene encoding a cytotoxin, for therapy of
CC cancer, especially neoplasias. The telomerase is necessary for the
CC unrestricted proliferative capacity of many human cancers. Mutation or
CC dysregulation of the telomerase repression pathway may cause reactivation
CC or upregulation of telomerase expression in cancer. Substances,
CC identified in the methods, can be used to block transcription from the TR
CC gene promoter through interaction of the 5' regulatory sequences. These
CC substances, e.g. antisense oligonucleotides, transcription factors,
CC peptide nucleic acids and factors that disrupt signal transduction, are
CC useful for cancer therapy. In particular, gene therapy vectors
CC (especially pG62-codAupp) comprising the promoter and a viral thymidine
CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that
CC neoplasia can be controlled or treated. Direct down-regulation of
CC telomerase RNA gene through manipulation of transcription factors may be
CC effective anticancer therapy and the cloning of the hTR gene promoter
CC allows the analysis of therapeutic molecules which modulate hTR promoter
CC activity. Sequences AA207324-332 and AA200332-340 represent constructs
CC with hTR promoter sequence element mutations
XX
SQ Sequence 51 BP; 8 A; 8 C; 21 G; 14 T; 0 U; 0 Other;
Query Match 10.2%; Score 46.2; DB 1; Length 51;
Best Local Similarity 94.1%; Pred. No. 2.6;
Matches 48; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1 GGGTTGCGAGGGTGGCGCTGGAGGGGTGGTGGCCATTTTGTCTAACC 51
DB 1 GGGTTGCGAGAAATGGCGCTGGAGGGGTGGTGGCCATTTTGTCTAACC 51
RESULT 7
AAZ00335
ID AAZ00335 standard; DNA; 51 BP.
XX
AC AAZ00335;
XX
DT 22-OCT-1999 (first entry)
XX
DE Mutated hTR promoter fragment containing construct 29112 (mSp1.4).
XX Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;
KW gene therapy; thymidine kinase gene; anticancer therapy; human; ss.
XX Homo sapiens.
OS Synthetic.
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XX WO9938964-A2.
PN 05-AUG-1999.
PD 29-JAN-1999; 99WO-GB000308.
XX 29-JAN-1999; 99WO-GB000308.
XX 29-JAN-1998; 98GB-00001902.
XX (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.
PA Keith WN;
PI WPI; 1999-479183/40.
DR Mouse and human telomerase RNA gene promoters, useful for tumor specific
XX gene therapy.
XX Disclosure; Fig 19; 109pp; English.
XX The invention relates to promoter regions from mouse and human telomerase
CC RNA (TR) component genes. The TR gene promoter can be linked to a
CC heterologous gene, especially a gene encoding a cytotoxin, for therapy of
CC cancer, especially neoplasias. The telomerase is necessary for the
CC unrestricted proliferative capacity of many human cancers. Mutation or
CC dysregulation of the telomerase repression pathway may cause reactivation
CC or upregulation of telomerase expression in cancer. Substances,
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CC gene promoter through interaction of the 5' regulatory sequences. These
CC substances, e.g. antisense oligonucleotides, transcription factors,
CC peptide nucleic acids and factors that disrupt signal transduction, are
CC useful for cancer therapy. In particular, gene therapy vectors
CC (especially pG62-codAupp) comprising the promoter and a viral thymidine
CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that
CC neoplasia can be controlled or treated. Direct down-regulation of
CC telomerase RNA gene through manipulation of transcription factors may be
CC effective anticancer therapy and the cloning of the hTR gene promoter
CC allows the analysis of therapeutic molecules which modulate hTR promoter
CC activity. Sequences AA207324-332 and AA200332-340 represent constructs
CC with hTR promoter sequence element mutations
XX
SQ Sequence 51 BP; 6 A; 8 C; 22 G; 15 T; 0 U; 0 Other;
Query Match 10.2%; Score 46.2; DB 1; Length 51;
Best Local Similarity 94.1%; Pred. No. 2.6;
Matches 48; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1 GGGTTGCGAGGGTGGCGCTGGAGGGGTGGTGGCCATTTTGTCTAACC 51
DB 1 GGGTTGCGAGGGTGGCGCTGGAGGGTAAAGGTGGTGGCCATTTTGTCTAACC 51
RESULT 8
AAZ00337
ID AAZ00337 standard; DNA; 47 BP.
XX
AC AAZ00337;
XX
DT 22-OCT-1999 (first entry)
XX
DE Mutated hTR promoter fragment containing construct 112(RCE).
XX Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;
KW gene therapy; thymidine kinase gene; anticancer therapy; human; ss.
XX Homo sapiens.
OS Synthetic.
XX WO9938964-A2.
PN 05-AUG-1999.
PD 29-JAN-1999; 99WO-GB000308.
XX 29-JAN-1999; 99WO-GB000308.
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XX PR 29-JAN-1998; 98GB-00001902.
XX PA (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.
XX PI Keith WN;
XX PS WPI; 1999-479183/40.
XX PT Mouse and human telomerase RNA gene promoters, useful for tumor specific
XX PT gene therapy.
XX PS Disclosure; Fig 19; 109pp; English.
XX CC The invention relates to promoter regions from mouse and human telomerase
XX CC RNA (TR) component genes. The TR gene promoter can be linked to a
XX CC heterologous gene, especially a gene encoding a cytotoxin, for therapy of
XX CC cancer, especially neoplasias. The telomerase is necessary for the
XX CC unrestricted proliferative capacity of many human cancers. Mutation or
XX CC dysregulation of the telomerase repression pathway may cause reactivation
XX CC or upregulation of telomerase expression in cancer. Substances,
XX CC identified in the methods, can be used to block transcription from the TR
XX CC gene promoter through interaction of the 5' regulatory sequences. These
XX CC substances, e.g. antisense oligonucleotides, transcription factors,
XX CC peptide nucleic acids and factors that disrupt signal transduction, are
XX CC useful for cancer therapy. In particular, gene therapy vectors
XX CC (especially pGT62-codAupp) comprising the promoter and a viral thymidine
XX CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that
XX CC neoplasia can be controlled or treated. Direct down-regulation of
XX CC telomerase RNA gene through manipulation of transcription factors may be
XX CC effective anticancer therapy and the cloning of the hTR gene promoter
XX CC allows the analysis of therapeutic molecules which modulate hTR promoter
XX CC activity. Sequences AAZ07324-332 and AAZ00332-340 represent constructs
XX CC with hTR promoter sequence element mutations
XX SQ Sequence 47 BP; 6 A; 7 C; 20 G; 14 T; 0 U; 0 Other;
Query Match 8.8%; Score 39.6; DB 1; Length 47;
Best Local Similarity 91.3%; Pred. No. 8.9;
Matches 42; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 6 GCGGAGGGTGGCGCTGGAGGGGTGGTGGCCATTTTGTCTAACC 51
Db | | | | | | | | | | | | | | | | | | | | | |
2 GTGGAGGGTGGCGCTGGGTAAAGTGGTGGCCATTTTGTCTAACC 47
RESULT 9
AAZ00336
XX ID AAZ00336 standard; DNA; 47 BP.
XX AC AAZ00336;
XX DT 22-OCT-1999 (first entry)
XX DE Mutated hTR promoter fragment containing construct 111 (mSp1.4).
XX KW Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;
XX KW gene therapy; thymidine kinase gene; anticancer therapy; human; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX PN WO9938964-A2.
XX PS 05-AUG-1999.
XX PD 29-JAN-1999; 99WO-GB0000308.
XX PF 29-JAN-1999; 99WO-GB0000308.
XX PR 29-JAN-1998; 98GB-00001902.
XX PA (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.
XX PI Keith WN;
```

```
XX WPI; 1999-479183/40.
XX Mouse and human telomerase RNA gene promoters, useful for tumor specific
XX PT gene therapy.
XX PS Disclosure; Fig 19; 109pp; English.
XX CC The invention relates to promoter regions from mouse and human telomerase
XX CC RNA (TR) component genes. The TR gene promoter can be linked to a
XX CC heterologous gene, especially a gene encoding a cytotoxin, for therapy of
XX CC cancer, especially neoplasias. The telomerase is necessary for the
XX CC unrestricted proliferative capacity of many human cancers. Mutation or
XX CC dysregulation of the telomerase repression pathway may cause reactivation
XX CC or upregulation of telomerase expression in cancer. Substances,
XX CC identified in the methods, can be used to block transcription from the TR
XX CC gene promoter through interaction of the 5' regulatory sequences. These
XX CC substances, e.g. antisense oligonucleotides, transcription factors,
XX CC peptide nucleic acids and factors that disrupt signal transduction, are
XX CC useful for cancer therapy. In particular, gene therapy vectors
XX CC (especially pGT62-codAupp) comprising the promoter and a viral thymidine
XX CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that
XX CC neoplasia can be controlled or treated. Direct down-regulation of
XX CC telomerase RNA gene through manipulation of transcription factors may be
XX CC effective anticancer therapy and the cloning of the hTR gene promoter
XX CC allows the analysis of therapeutic molecules which modulate hTR promoter
XX CC activity. Sequences AAZ07324-332 and AAZ00332-340 represent constructs
XX CC with hTR promoter sequence element mutations
XX SQ Sequence 47 BP; 8 A; 7 C; 19 G; 13 T; 0 U; 0 Other;
Query Match 8.8%; Score 39.6; DB 1; Length 47;
Best Local Similarity 91.3%; Pred. No. 8.9;
Matches 42; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 6 GCGGAGGGTGGCGCTGGAGGGGTGGTGGCCATTTTGTCTAACC 51
Db | | | | | | | | | | | | | | | | | | | | | |
2 GTGGAAATGGCGCTGGAGGGGTGGTGGCCATTTTGTCTAACC 47
RESULT 10
AAZ00339
XX ID AAZ00339 standard; DNA; 47 BP.
XX AC AAZ00339;
XX DT 22-OCT-1999 (first entry)
XX DE Mutated hTR promoter fragment containing construct 115.
XX KW Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;
XX KW gene therapy; thymidine kinase gene; anticancer therapy; human; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX PN WO9938964-A2.
XX PS 05-AUG-1999.
XX PD 29-JAN-1999; 99WO-GB0000308.
XX PF 29-JAN-1999; 99WO-GB0000308.
XX PR 29-JAN-1998; 98GB-00001902.
XX PA (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.
XX PI Keith WN;
XX WPI; 1999-479183/40.
XX Mouse and human telomerase RNA gene promoters, useful for tumor specific
XX PT gene therapy.
```





CC gene promoter through interaction of the 5' regulatory sequences. These  
 CC substances, e.g. antisense oligonucleotides, transcription factors,  
 CC peptide nucleic acids and factors that disrupt signal transduction, are  
 CC useful for cancer therapy. In particular, gene therapy vectors  
 CC (especially pGT62-codAupp) comprising the promoter and a viral thymidine  
 CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that  
 CC neoplasia can be controlled or treated. Direct down-regulation of  
 CC telomerase RNA gene through manipulation of transcription factors may be  
 CC effective anticancer therapy and the cloning of the hTR gene promoter  
 CC allows the analysis of therapeutic molecules which modulate hTR promoter  
 CC activity. Sequences AA207696-321 represent PCR primers used in cloning  
 CC and mutagenesis of human TR gene (hTR) promoter region  
 CC  
 CC Sequence 38 BP; 3 A; 7 C; 21 G; 7 T; 0 U; 0 Other;  
 SQ  
 Query Match 6.9%; Score 31.2; DB 1; Length 38;  
 Best Local Similarity 91.7%; Pred. No. 36;  
 Matches 33; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1 GGGTTGGAGGGTGGGCTGGGAGGGGTGGTGGCC 36  
 |||||  
 Db 3 GGGTTGGAGGGTGGGCTGGGTAAGGTGGTGGCC 38  
 |||||  
 RESULT 13  
 AA207297  
 ID AA207297 standard; DNA; 38 BP.  
 AC  
 AA207297;  
 XX  
 22-OCT-1999 (first entry)  
 DT  
 XX  
 Human telomerase RNA gene (hTR) promoter specific primer h111.  
 DE  
 XX  
 Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;  
 KW gene therapy; thymidine kinase gene; anticancer therapy; human;  
 KW mutagenesis; PCR primer; ss.  
 XX  
 Synthetic.  
 OS  
 Homo sapiens.  
 OS  
 WO9938964-A2.  
 PN  
 05-AUG-1999.  
 PD  
 XX  
 29-JAN-1999; 99WO-GB000308.  
 PF  
 XX  
 29-JAN-1998; 98GB-00001902.  
 PR  
 XX  
 (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.  
 PA  
 XX  
 Keith WN;  
 PI  
 WPI; 1999-479183/40.  
 DR  
 XX  
 Mouse and human telomerase RNA gene promoters, useful for tumor specific  
 PT gene therapy.  
 PT  
 XX  
 Disclosure; Fig 12; 109pp; English.  
 PS  
 XX  
 The invention relates to promoter regions from mouse and human telomerase  
 CC RNA (TR) component genes. The TR gene promoter can be linked to a  
 CC heterologous gene, especially a gene encoding a cytotoxin, for the therapy of  
 CC cancer, especially neoplasias. The telomerase is necessary for the  
 CC unrestricted proliferative capacity of many human cancers. Mutation or  
 CC dysregulation of the telomerase repression pathway may cause reactivation  
 CC or upregulation of telomerase expression in cancer. Substances,  
 CC identified in the methods, can be used to block transcription from the TR  
 CC gene promoter through interaction of the 5' regulatory sequences. These  
 CC substances, e.g. antisense oligonucleotides, transcription factors,  
 CC peptide nucleic acids and factors that disrupt signal transduction, are  
 CC useful for cancer therapy. In particular, gene therapy vectors  
 CC (especially pGT62-codAupp) comprising the promoter and a viral thymidine

CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that  
 CC neoplasia can be controlled or treated. Direct down-regulation of  
 CC telomerase RNA gene through manipulation of transcription factors may be  
 CC effective anticancer therapy and the cloning of the hTR gene promoter  
 CC allows the analysis of therapeutic molecules which modulate hTR promoter  
 CC activity. Sequences AA207696-321 represent PCR primers used in cloning  
 CC and mutagenesis of human TR gene (hTR) promoter region  
 CC  
 CC Sequence 38 BP; 5 A; 7 C; 20 G; 6 T; 0 U; 0 Other;  
 SQ  
 Query Match 6.9%; Score 31.2; DB 1; Length 38;  
 Best Local Similarity 91.7%; Pred. No. 36;  
 Matches 33; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 QY 1 GGGTTGGAGGGTGGGCTGGGAGGGGTGGTGGCC 36  
 |||||  
 Db 3 GGGTTGGAGAAATGGGCTGGGAGGGGTGGTGGCC 38  
 |||||  
 RESULT 14  
 AA207645/C  
 ID AA207645 standard; DNA; 31 BP.  
 AC  
 AA207645;  
 XX  
 15-FEB-1999 (first entry)  
 DT  
 XX  
 Antisense oligonucleotide anti-P for human telomerase RNA component.  
 DE  
 XX  
 Human; telomerase RNA component; anticancer therapy; purification; assay;  
 KW vaccine; cancer; antisense oligonucleotide; ss.  
 KW  
 XX  
 Synthetic.  
 OS  
 Homo sapiens.  
 OS  
 XX  
 Key Location/Qualifiers  
 FH modified\_base 1  
 FT /\*tag= a  
 FT /note= "biotinylated"  
 FT modified\_base 31  
 FT /\*tag= b  
 FT /note= "biotinylated"  
 FT  
 XX  
 WO9845450-A1.  
 PN  
 15-OCT-1998.  
 PD  
 XX  
 04-APR-1997; 97WO-US006012.  
 PF  
 XX  
 04-APR-1997; 97WO-US006012.  
 PR  
 XX  
 (GERO-) GERON CORP.  
 PA  
 XX  
 Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
 PI Kealey JT;  
 PI  
 XX  
 WPI; 1998-594485/50.  
 DR  
 XX  
 Purification of telomerase on affinity material - useful for, e.g.  
 PT diagnosis and treatment of cancer.  
 PT  
 XX  
 Disclosure; Page 24; 76pp; English.  
 PS  
 XX  
 The present sequence represents an antisense oligonucleotide directed  
 CC against the human telomerase RNA component gene sequences. The  
 CC oligonucleotide can be used as an affinity agent in the methods of the  
 CC invention, which are used to purify human telomerase. The methods involve  
 CC the use of several sequential steps, including the use of two matrices  
 CC that bind molecules bearing negative charges, a matrix that binds  
 CC molecules bearing positive charges, an affinity purification step and a  
 CC size separation. Telomerase is a particular target of anticancer  
 CC therapies, and is useful in assays for characterizing (pre)cancerous  
 CC cells. Telomerase can also be used to screen for specific modulators, for

CC	probes to detect or quantitate polynucleotides having a human telomerase RNA (hTR) sequence. PNA probes are also used for forensic identification of individuals, e.g. paternity testing, based on hTR gene restriction
CC	fragment length polymorphism (RFLP) pattern. PNAs are also useful as
CC	probes to detect the RNA component of a mammalian telomerase and as
CC	inhibitors of telomerase activity. The method of the present invention
CC	allows cancerous conditions to be detected with increased confidence and
CC	possibly at an earlier stage, before cells are detected as cancerous
CC	based on pathological characteristics. The diagnostic and prognostic
CC	methods of the present invention can be used to detect an immortal or
CC	neoplastic cell or tumour tissue or cancer of any origin, provided the
CC	cell expresses telomerase activity and its RNA component
XX	
SQ	Sequence 31 BP; 8 A; 6 C; 8 G; 0 T; 9 U; 0 Other;
	Query Match 6.9%; Score 31; DB 1; Length 31;
	Best Local Similarity 71.0%; Pred. No. 28;
	Matches 22; Conservative 9; Mismatches 0; Indels 0; Gaps
Qy	40 TTTTGTCTAACCTAACTAGAGAGGCGGTAG 70
Db	1 UUUUGUCUAAACCUAACUGAGAAGGCGGUAG 31
	:    :    :    :    :
	:    :    :    :    :
RESULT 16	
AAS15462	ID AAS15462 standard; RNA; 31 BP.
XX	
AC	AAS15462;
XX	
DT	14-FEB-2002 (first entry)
XX	
DE	Human telomerase RNA (hTR) strand #2.
KW	Mammalian; forensic; paternity testing; human telomerase RNA component;
KW	hTR gene RFLP pattern; cancer; inflammation; lymphoproliferative disease;
KW	autoimmune disease; neurodegenerative disease; neoplasia; hyperplasia;
KW	HIV; AIDS; human immunodeficiency virus; telomere metabolism; cytostatic
KW	acquired immunodeficiency syndrome; anti-inflammatory; ss.
XX	
OS	Homo sapiens.
XX	
Key	Location/Qualifiers
FH	7..17
FT	misc_feature
FT	/*tag= a
FT	/note= "Telomerase RNA active site"
XX	
PN	US6294650-B1.
XX	
PD	25-SEP-2001.
XX	
XX	08-JUL-1999; 99US-00349532.
PF	
XX	
PR	09-APR-1996; 96US-00630019.
PR	09-APR-1997; 97US-00838545.
XX	
PA	(TEXA ) UNIV TEXAS SYSTEM.
XX	
PI	Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;
XX	
XX	WPI; 2001-638024/73.
DR	
XX	
XX	
PT	New peptide nucleic acids that hybridizes to the RNA component of
PT	mammalian telomerase, useful for treating or preventing cancer, or
PT	inflammation, lymphoproliferative diseases, autoimmune disease, or
PT	neurodegenerative diseases.
XX	
XX	
PS	Example 2; Col 37-38; 46pp; English.
XX	
CC	The present invention relates to peptide nucleic acids (PNAs), comprising
CC	a sequence of 6-25 nucleobases, that inhibit telomerase activity in
CC	mammalian cells by hybridising to the RNA component of mammalian
CC	telomerase. The PNAs are useful as probes to detect the RNA component of



CC measuring telomerase enzymatic activity of the composition in presence of  
 CC a regulator. The telomerase protein of the invention may be used in  
 CC developing and testing assays for measuring telomerase activity which are  
 CC useful in characterizing cancer and pre-cancer cells, for identifying and  
 CC testing regulators of telomerase activity in in vitro assay and for  
 CC preparing antibodies against telomerase. The mammalian telomerase protein  
 CC of the invention is at least approximately 3000 fold more pure (in terms  
 CC of telomerase activity per weight of protein) than a crude extract of  
 CC cell from adenovirus- transformed kidney cell. Purified telomerase  
 CC facilitates a thorough biochemical analysis of the enzyme's mechanism for  
 CC developing mechanism- based regulators. The present sequence represents a  
 CC human telomerase antisense oligonucleotide which has affinity to  
 CC telomerase and is used to purify the telomerase protein of the invention  
 CC  
 XX  
 SQ Sequence 31 BP; 7 A; 9 C; 7 G; 8 T; 0 U; 0 Other;  
 Query Match 6.9%; Score 31; DB 1; Length 31;  
 Best Local Similarity 100.0%; Pred. No. 28;  
 Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 42 TTGTCTAACCTTAAGGAGGCGGTAGGC 72  
 Db 31 TTGTCTAACCTTAAGGAGGCGGTAGGC 1  
 RESULT 19  
 ADC35648/c  
 ID ADC35648 standard; DNA; 31 BP.  
 XX  
 AC ADC35648;  
 XX  
 DT 18-DEC-2003 (first entry)  
 XX  
 DE Human telomerase RNA component antisense oligonucleotide seq id 1.  
 XX  
 KW mammalian telomerase protein; telomerase purification; telomerase;  
 KW anion exchange matrix; cation exchange matrix; selectivity matrix;  
 KW gel filtration chromatography; gradient centrifugation;  
 KW antisense oligonucleotide; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX US6545133-B1.  
 XX  
 XX 08-APR-2003.  
 XX  
 XX 20-NOV-2000; 2000US-00717829.  
 XX  
 XX 04-AUG-1995; 95US-00510736.  
 XX  
 XX 04-APR-1997; 97US-00833377.  
 XX  
 XX 18-OCT-1999; 99US-00420056.  
 XX  
 XX (GERO-) GERON CORP.  
 XX  
 XX Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
 XX WPI; 2003-742824/70.  
 XX  
 XX Obtaining telomerase, by preparing enriched solution from cell expressing  
 XX telomerase, combining the solution with oligonucleotide having specific  
 XX affinity for the protein and collecting protein bound to oligonucleotide.  
 XX  
 XX Disclosure; SEQ ID NO 1; 24pp; English.  
 XX  
 XX The invention describes a method of obtaining mammalian telomerase  
 XX protein (I). The method involves preparing enriched solution (ES) from a  
 XX cell expressing telomerase where the component of (I) in ES is separated  
 XX from other proteins expressed by cell by combining ES with  
 XX oligonucleotide (O) having specific affinity for (I), and collecting  
 XX protein bound to (O). The oligonucleotide comprises a retrievable label  
 XX such as biotin and contains a sequence that is specifically recognized by  
 XX telomerase protein. The oligonucleotide contains or does not contain the  
 XX sequence (TTAGGG)3. The method further comprises combining a fraction

CC containing telomerase protein with an anion exchange matrix, and  
 CC collecting protein that binds the matrix, combining a fraction containing  
 CC telomerase protein with a cation exchange matrix (such as a heparin  
 CC matrix), and collecting protein that binds the matrix. The method  
 CC comprises successively enriching fractions containing telomerase protein  
 CC on several different ion exchange matrices and combining a fraction  
 CC containing telomerase protein with an intermediate selectivity matrix,  
 CC collecting protein that binds the matrix, where the intermediate  
 CC selectivity matrix and separating a fraction containing the telomerase  
 CC protein by gel filtration chromatography or gradient centrifugation. The  
 CC telomerase is enriched from an extract of cells stably expressing  
 CC telomerase. This sequence represents an antisense oligonucleotide to the  
 CC RNA component of human telomerase that can be used in the purification  
 CC method of the invention.  
 CC  
 XX  
 SQ Sequence 31 BP; 7 A; 9 C; 7 G; 8 T; 0 U; 0 Other;  
 Query Match 6.9%; Score 31; DB 1; Length 31;  
 Best Local Similarity 100.0%; Pred. No. 28;  
 Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 42 TTGTCTAACCTTAAGGAGGCGGTAGGC 72  
 Db 31 TTGTCTAACCTTAAGGAGGCGGTAGGC 1  
 RESULT 20  
 ADG62870/c  
 ID ADG62870 standard; DNA; 31 BP.  
 XX  
 AC ADG62870;  
 XX  
 DT 11-MAR-2004 (first entry)  
 XX  
 DE Human telomerase RNA antisense oligonucleotide, anti-P.  
 XX  
 KW Telomerase activity; therapy; cancer; cytostatic; antisense; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX Key Location/Qualifiers  
 XX modified\_base 1  
 XX /tag= a  
 XX /mod\_base= OTHER  
 XX /note= "Biotin labelled"  
 XX modified\_base 31  
 XX /tag= b  
 XX /mod\_base= OTHER  
 XX /note= "Biotin labelled"  
 XX  
 XX US2003186282-A1.  
 XX  
 XX 02-OCT-2003.  
 XX  
 XX 24-DEC-2002; 2002US-00330872.  
 XX  
 XX 04-AUG-1995; 95US-00510736.  
 XX  
 XX 04-APR-1997; 97US-00833377.  
 XX  
 XX 18-OCT-1999; 99US-00420056.  
 XX  
 XX 20-NOV-2000; 2000US-00717828.  
 XX  
 XX (WEIN/) WEINRICH S L.  
 XX (ATKI/) ATKINSON E M.  
 XX (LICH/) LICHTSTEINER S P.  
 XX (VASS/) VASSEROT A P.  
 XX (PRUZ/) PRUZAN R A.  
 XX  
 XX Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
 XX WPI; 2003-811733/76.  
 XX  
 XX Identifying telomerase regulators useful for treating cancer.  
 XX

PS Disclosure; SEQ ID NO 1; 22pp; English.

XX The invention relates to a method for identifying regulators of

CC telomerase activity that may be useful for treating cancers. The method

CC may be used to identify regulators e.g. antibodies, of telomerase

CC activity which may be useful as cancer treatments. It has been found that

CC found that the cells of many human cancers have telomerase activity. This

CC helps explain why cancer cells continue dividing without becoming

CC senescent. If telomerase activity in cancer cells can be inhibited, the

CC cancer cells are expected to reach senescence and cease dividing. The

CC present sequence is human telomerase antisense oligonucleotide used to

CC illustrate the method of the invention.

XX

XX

SEQ Sequence 31 BP; 7 A; 9 C; 7 G; 8 T; 0 U; 0 Other;

Query Match 6.9%; Score 31; DB 1; Length 31;

Best Local Similarity 100.0%; Pred. No. 28;

Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGCTAACCTAACTAGAGAGGGCGTAGGC 72

DB 31 TTGCTAACCTAACTAGAGAGGGCGTAGGC 1

RESULT 21

AAT11043/c

ID AAT11043 standard; DNA; 30 BP.

XX AC AAT11043;

XX 02-JUL-1996 (first entry)

XX Primer for production of telomerase antisense oligonucleotide.

XX

XX Telomerase; mammal; antisense; triplex forming oligonucleotide; plasmid;

KW probe; primer; ribozyme; ss.

XX

OS Synthetic.

XX

XX WO9601614-A2.

XX

XX 25-JAN-1996.

XX

XX 07-JUL-1995; 95WO-US008620.

XX

XX 07-JUL-1994; 94US-00272102.

XX 27-OCT-1994; 94US-00330123.

XX 13-FEB-1995; 95US-00387524.

XX 07-JUN-1995; 95US-00485778.

XX

XX (COLD-) COLD SPRING HARBOR LAB.

XX (GERO-) GERON CORP.

XX Andrews WH, Avillon AA, Feng J, Funk W, Greider C, Marhuenda MA;

XX Villeponteau B;

XX WPI; 1996-097428/10.

XX

XX RNA components of (non)human mammalian telomerase(s) - useful in studying

PT cell senescence and immortalisation.

XX

XX Example 1; Page 53; 85pp; English.

XX

XX The RNA components of (non) human mammalian telomerase(s) especially from

CC mouse, rat and chinese hamster are all claimed. Antisense

CC oligonucleotides can be used to block the activity of the telomerase;

CC probes and primers can be used in detection; vectors and host cells

CC transformed with the isolated telomerase genes can be used for production

CC of telomerases; RNA and DNA ribozymes and triplex forming

CC oligonucleotides directed against the telomerase genes can be used

CC therapeutically as can plasmids. A mouse which lacks the telomerase gene

CC (also claimed) can be used for study of telomere regulation in vivo, and

CC the role it plays in immortalisation. Three primers (AAT11040, AAT11043,

CC AAT11044) were used to produce antisense oligonucleotides which were then

CC used to produce antisense expression plasmids. AAT11040 was used

CC alongside both AAT11043 and AAT11044 to produce two different antisense

CC molecules

XX

XX Sequence 30 BP; 13 A; 6 C; 11 G; 0 T; 0 U; 0 Other;

Query Match 6.7%; Score 30; DB 1; Length 30;

Best Local Similarity 100.0%; Pred. No. 32;

Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 77 TGCTTTTGCTCCCGCGCGCTGTTTTC 106

DB 30 TGCTTTTGCTCCCGCGCGCTGTTTTC 1

RESULT 22

AAT10298/c

ID AAT10298 standard; DNA; 30 BP.

XX AC AAT10298;

XX 09-SEP-1996 (first entry)

XX RNA component of human telomerase antisense plasmid PCR primer G1.

XX

XX RNA component; human; telomerase; lung fibroblast; cell line WI-38;

KW recombinant production; synthesis; mutant; detection; mammalian;

KW identification; modulating agent; neoplastic condition;

KW transcriptional regulatory sequence; gene therapy; disease;

KW polymerase chain reaction; antisense plasmid; PCR primer; ss.

XX

OS Synthetic.

XX

XX WO9601835-A1.

XX

XX 25-JAN-1996.

XX

XX 06-JUL-1995; 95WO-US008530.

XX

XX 07-JUL-1994; 94US-00272102.

XX 27-OCT-1994; 94US-00330123.

XX 07-JUN-1995; 95US-00472802.

XX 07-JUN-1995; 95US-00482115.

XX

XX (GERO-) GERON CORP.

XX Villeponteau B, Feng J, Funk W, Andrews WH;

XX WPI; 1996-097581/10.

XX

XX RNA component of mammalian telomerase, esp. human - useful in identifying

PT e.g. candidate telomerase-modulating agents.

XX

XX Example 8; Page 80; 114pp; English.

XX

XX The present sequence is a PCR primer for a RNA component of human

CC telomerase (RCHT), antisense plasmid. RCHT was derived from a genomic DNA

CC library obtd. from the human lung fibroblast cell line WI-38. The RCHT

CC can be used in the recombinant prodn. of an active telomerase mol.,

CC capable of adding sequences to chromosomal DNA telomeres, and in the

CC synthesis of mutant sequences for the detection of mutant mammalian

CC telomerase RNA component polynucleotides. The RCHT may also be used in

CC the identification of telomerase modulating agents, and in the detection

CC of telomerase related, or neoplastic conditions in a patient.

CC polynucleotides of at least 25 consecutive nucleotides identical, or

CC complementary to the RCHT sequence linked to heterologous transcriptional

CC regulatory sequences, can be used for the gene therapy of human diseases

XX

XX Sequence 30 BP; 13 A; 6 C; 11 G; 0 T; 0 U; 0 Other;

Query Match 6.7%; Score 30; DB 1; Length 30;

Best Local Similarity 100.0%; Pred. No. 32;

Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 77 TGCCTTTTGTCTCCCGCGCTGTTTTC 106  
 DB 30 TGCCTTTTGTCTCCCGCGCTGTTTTC 1

RESULT 23  
 AAV63648/c  
 ID AAV63648 standard; DNA; 30 BP.

XX AC AAV63648;  
 XX DT 15-FEB-1999 (first entry)  
 XX DE Antisense oligonucleotide 13 for human telomerase RNA component.  
 XX KW Human; telomerase RNA component; anticancer therapy; purification; assay;  
 XX KW vaccine; cancer; antisense oligonucleotide; ss.  
 XX OS Synthetic.  
 XX OS Homo sapiens.  
 XX PH Key Location/Qualifiers  
 FT modified\_base 1 /\*tag= a  
 FT /note= "biotinylated"  
 XX PN WO9845450-A1.  
 XX PD 15-OCT-1998.  
 XX PF 04-APR-1997; 97WO-US006012.  
 XX PR 04-APR-1997; 97WO-US006012.  
 XX PA (GERO-) GERON CORP.  
 XX PI Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
 XX PI Kealey JT;  
 XX DR WPI; 1998-594485/50.  
 XX PT Purification of telomerase on affinity material - useful for, e.g.  
 XX PT diagnosis and treatment of cancer.  
 XX PS Disclosure; Page 24; 76pp; English.  
 XX CC The present sequence represents an antisense oligonucleotide directed  
 CC against the human telomerase RNA component gene sequences. The  
 CC oligonucleotide can be used as an affinity agent in the methods of the  
 CC invention, which are used to purify human telomerase. The methods involve  
 CC the use of several sequential steps, including the use of two matrices  
 CC that bind molecules bearing negative charges, a matrix that binds  
 CC molecules bearing positive charges, an affinity purification step and a  
 CC size separation. Telomerase is a particular target of anticancer  
 CC therapies, and is useful in assays for characterizing (pre)cancerous  
 CC cells. Telomerase can also be used to screen for specific modulators, for  
 CC biochemical analysis of its activity, and in preparation of antibodies.  
 CC Fragments of telomerase, or nucleic acid encoding them, are used in  
 CC vaccines, and for treating over expression of telomerase, particularly in  
 CC cancer  
 XX SQ Sequence 30 BP; 6 A; 6 C; 8 G; 10 T; 0 U; 0 Other;

Query Match 6.7%; Score 30; DB 1; Length 30;  
 Best Local Similarity 100.0%; Pred. No. 32;  
 Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 167 AACAAAAAATGTCAGCTGCTGCGCCGTC 196  
 DB 30 AACAAAAAATGTCAGCTGCTGCGCCGTC 1

RESULT 24  
 AAV63649/c  
 ID AAV63649 standard; DNA; 30 BP.

XX AC AAV63649;  
 XX DT 15-FEB-1999 (first entry)  
 XX DE Antisense oligonucleotide 14 for human telomerase RNA component.  
 XX KW Human; telomerase RNA component; anticancer therapy; purification; assay;  
 XX KW vaccine; cancer; antisense oligonucleotide; ss.  
 XX OS Synthetic.  
 XX OS Homo sapiens.  
 XX PH Key Location/Qualifiers  
 FT modified\_base 1 /\*tag= a  
 FT /note= "biotinylated"  
 XX PN WO9845450-A1.  
 XX PD 15-OCT-1998.  
 XX PF 04-APR-1997; 97WO-US006012.  
 XX PR 04-APR-1997; 97WO-US006012.  
 XX PA (GERO-) GERON CORP.  
 XX PI Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
 XX PI Kealey JT;  
 XX DR WPI; 1998-594485/50.  
 XX PT Purification of telomerase on affinity material - useful for, e.g.  
 XX PT diagnosis and treatment of cancer.  
 XX PS Disclosure; Page 24; 76pp; English.  
 XX CC The present sequence represents an antisense oligonucleotide directed  
 CC against the human telomerase RNA component gene sequences. The  
 CC oligonucleotide can be used as an affinity agent in the methods of the  
 CC invention, which are used to purify human telomerase. The methods involve  
 CC the use of several sequential steps, including the use of two matrices  
 CC that bind molecules bearing negative charges, a matrix that binds  
 CC molecules bearing positive charges, an affinity purification step and a  
 CC size separation. Telomerase is a particular target of anticancer  
 CC therapies, and is useful in assays for characterizing (pre)cancerous  
 CC cells. Telomerase can also be used to screen for specific modulators, for  
 CC biochemical analysis of its activity, and in preparation of antibodies.  
 CC Fragments of telomerase, or nucleic acid encoding them, are used in  
 CC vaccines, and for treating over expression of telomerase, particularly in  
 CC cancer  
 XX SQ Sequence 30 BP; 8 A; 5 C; 13 G; 4 T; 0 U; 0 Other;

Query Match 6.7%; Score 30; DB 1; Length 30;  
 Best Local Similarity 100.0%; Pred. No. 32;  
 Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 137 CCTGCGCGCTTCCACCGTTTCATTCTAGAGC 166  
 DB 30 CCTGCGCGCTTCCACCGTTTCATTCTAGAGC 1

RESULT 25  
 AAV41175/c  
 ID AAV41175 standard; DNA; 30 BP.

XX AC AAV41175;

XX DT 08-OCT-1998 (first entry)  
 XX DE RNA component of human telomerase (hTR) antisense oligo 21.  
 XX DE  
 XX DE  
 KW RNA component; human telomerase; antisense oligonucleotide; infection;  
 KW neuroblastoma; bladder cancer; colon cancer; prostate cancer; cancer;  
 KW contraception; sterilisation; immunosuppression; therapeutic; hTR;  
 KW immune system down-regulation; anti-inflammatory therapy; ss.  
 XX Synthetic.  
 OS Homo sapiens.  
 XX WO9828442-A1.  
 XX PN  
 XX PD 02-JUL-1998.  
 XX PF 19-DEC-1997; 97WO-US023619.  
 XX PR 20-DEC-1996; 96US-00770564.  
 XX PR 20-DEC-1996; 96US-00770565.  
 XX PA (GERO-) GERON CORP.  
 XX PI Kim NW, Wu F, Kealey JT, Pruzan R, Weinrich SL;  
 XX WI; 1998-377670/32.  
 XX DR  
 XX PT New polynucleotide(s) anti-sense to human telomerase - used for detecting  
 PT or inhibiting human telomerase, e.g. for treating cancers, contraception,  
 PT immuno-suppression or treating infection.  
 XX PS Claim 11; Page 65; 80pp; English.  
 XX CC Sequences shown in AAV41169 to AAV41181 represent antisense  
 CC oligonucleotides to the RNA component of human telomerase (hTR). These  
 CC antisense oligonucleotides specifically hybridise to a nucleotide  
 CC sequence within an accessible region of the hTR, but that does not  
 CC hybridise to a sequence within the template region of hTR. These  
 CC oligonucleotides may specifically be used for detection of an RNA  
 CC component of human telomerase in a sample. This is useful for diagnosing  
 CC cancer (especially neuroblastoma, bladder, colon and prostate cancer),  
 CC and providing prognosis for a cancer patient. The inhibitory  
 CC oligonucleotides can inhibit the telomerase activity level in a cell by  
 CC interfering with transcription of the RNA component, decreasing the half-  
 CC life of the telomerase RNA component transcript, inhibiting assembly of  
 CC the RNA component into the telomerase holoenzyme, or inhibiting the  
 CC polymerase activity of telomerase. These antisense oligonucleotides can  
 CC be used for inhibiting telomerase activity in both cultured cells and in  
 CC cells in vivo. They can be used in therapeutics for treating or  
 CC preventing cancer, for contraception or sterilisation, for  
 CC immunosuppression, and for selectively down-regulating specific branches  
 CC of the immune system, e.g. a specific subset of T-cells, in anti-  
 CC inflammatory therapies or for treating infections by, e.g. yeast,  
 CC parasites or fungi  
 XX SQ Sequence 30 BP; 8 A; 5 C; 13 G; 4 T; 0 U; 0 Other;  
 Query Match 6.7%; Score 30; DB 1; Length 30;  
 Best Local Similarity 100.0%; Pred. No. 32;  
 Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 137 CCTGCCGCTTCCACCGTTTCATTCTAGAGC 166  
 Db 30 CCTGCCGCTTCCACCGTTTCATTCTAGAGC 1  
 RESULT 26  
 AAV41172/c  
 ID AAV41172 standard; DNA; 30 BP.  
 XX AC AAV41172;  
 XX DT

DT 08-OCT-1998 (first entry)  
 XX DE RNA component of human telomerase (hTR) antisense oligo 16.  
 XX DE  
 XX DE  
 KW RNA component; human telomerase; antisense oligonucleotide; infection;  
 KW neuroblastoma; bladder cancer; colon cancer; prostate cancer; cancer;  
 KW contraception; sterilisation; immunosuppression; therapeutic; hTR;  
 KW immune system down-regulation; anti-inflammatory therapy; ss.  
 XX Synthetic.  
 OS Homo sapiens.  
 XX WO9828442-A1.  
 XX PN  
 XX PD 02-JUL-1998.  
 XX PF 19-DEC-1997; 97WO-US023619.  
 XX PR 20-DEC-1996; 96US-00770564.  
 XX PR 20-DEC-1996; 96US-00770565.  
 XX PA (GERO-) GERON CORP.  
 XX PI Kim NW, Wu F, Kealey JT, Pruzan R, Weinrich SL;  
 XX WI; 1998-377670/32.  
 XX DR  
 XX PT New polynucleotide(s) anti-sense to human telomerase - used for detecting  
 PT or inhibiting human telomerase, e.g. for treating cancers, contraception,  
 PT immuno-suppression or treating infection.  
 XX PS Claim 11; Page 65; 80pp; English.  
 XX CC Sequences shown in AAV41169 to AAV41181 represent antisense  
 CC oligonucleotides to the RNA component of human telomerase (hTR). These  
 CC antisense oligonucleotides specifically hybridise to a nucleotide  
 CC sequence within an accessible region of the hTR, but that does not  
 CC hybridise to a sequence within the template region of hTR. These  
 CC oligonucleotides may specifically be used for detection of an RNA  
 CC component of human telomerase in a sample. This is useful for diagnosing  
 CC cancer (especially neuroblastoma, bladder, colon and prostate cancer),  
 CC and providing prognosis for a cancer patient. The inhibitory  
 CC oligonucleotides can inhibit the telomerase activity level in a cell by  
 CC interfering with transcription of the RNA component, decreasing the half-  
 CC life of the telomerase RNA component transcript, inhibiting assembly of  
 CC the RNA component into the telomerase holoenzyme, or inhibiting the  
 CC polymerase activity of telomerase. These antisense oligonucleotides can  
 CC be used for inhibiting telomerase activity in both cultured cells and in  
 CC cells in vivo. They can be used in therapeutics for treating or  
 CC preventing cancer, for contraception or sterilisation, for  
 CC immunosuppression, and for selectively down-regulating specific branches  
 CC of the immune system, e.g. a specific subset of T-cells, in anti-  
 CC inflammatory therapies or for treating infections by, e.g. yeast,  
 CC parasites or fungi  
 XX SQ Sequence 30 BP; 6 A; 10 C; 9 G; 5 T; 0 U; 0 Other;  
 Query Match 6.7%; Score 30; DB 1; Length 30;  
 Best Local Similarity 100.0%; Pred. No. 32;  
 Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 290 CTGCCACCGGAGAGTTGGCTCTGTCTGTCAG 319  
 Db 30 CTGCCACCGGAGAGTTGGCTCTGTCTGTCAG 1  
 RESULT 27  
 AA223627/c  
 ID AA223627 standard; DNA; 30 BP.  
 XX AC AA223627;  
 XX DT 07-JAN-2000 (first entry)



```
XX Human clone 28-1 telomerase oligonucleotide anti-P.
DE Telomerase; human; immune response; cancer; vaccine; treatment; disease;
KW primer; ss.
XX Synthetic.
OS Homo sapiens.
XX
XX Key Location/Qualifiers
FH modified_base 1
FT /*tag= a
FT /note= "5'-biotinylated guanosine"
XX
XX US968506-A.
XX
XX 19-OCT-1999.
XX
XX 04-APR-1997; 97US-00833377.
XX
XX 04-AUG-1995; 95US-00510736.
XX
XX (GERO-) GERON CORP.
XX
XX Atkinson EM, Lichtsteiner SP, Weinrich SL, Pruzan RA, Kealey JT;
PI Vasserot AP;
XX
XX WPI; 1999-590379/50.
XX
XX Compositions comprising human telomerase, useful for treating diseases
XX associated with overexpression of telomerase e.g. cancer.
XX
XX Disclosure; Col 43-44; 34pp; English.
XX
XX This invention describes a novel composition comprising human telomerase
XX having at least 2000-fold (preferably at least 6000-fold) increased
XX relative purity compared with crude extract of cells from adenovirus-
XX transformed kidney cell line. The composition is useful for eliciting an
XX immune response in animals and may therefore be used as a vaccine for
XX treating diseases associated with the overexpression of telomerase e.g.
XX cancer. AA23626-223637 represent oligonucleotides used in the isolation
XX of human clone 28-1 which contains a fragment of the human telomerase
XX described in the method of the invention
XX
XX Sequence 30 BP; 6 A; 9 C; 7 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 6.7%; Score 30; DB 1; Length 30;
XX Best Local Similarity 100.0%; Pred. No. 32;
XX Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 43 TGTCTAACCTTAAGGAGGCGTAGGC 72
XX |||||||||||||||||||||||||||
XX 30 TGTCTAACCTTAAGGAGGCGTAGGC 1
XX
XX RESULT 28
XX AA23630/c
XX ID AA23630 standard; DNA; 30 BP.
XX
XX AC AA23630;
XX
XX 07-JAN-2000 (first entry)
XX
XX Human clone 28-1 telomerase oligonucleotide oligo-13.
XX
XX Telomerase; human; immune response; cancer; vaccine; treatment; disease;
XX primer; ss.
XX Synthetic.
XX OS Homo sapiens.
XX
XX Key Location/Qualifiers
FH modified_base 1
FT /*tag= a
FT /note= "5'-biotinylated guanosine"
XX
```

```
FT /*tag= a
FT /note= "5'-biotinylated guanosine"
XX
XX US968506-A.
XX
XX 19-OCT-1999.
XX
XX 04-APR-1997; 97US-00833377.
XX
XX 04-AUG-1995; 95US-00510736.
XX
XX (GERO-) GERON CORP.
XX
XX Atkinson EM, Lichtsteiner SP, Weinrich SL, Pruzan RA, Kealey JT;
PI Vasserot AP;
XX
XX WPI; 1999-590379/50.
XX
XX Compositions comprising human telomerase, useful for treating diseases
XX associated with overexpression of telomerase e.g. cancer.
XX
XX Disclosure; Col 45-46; 34pp; English.
XX
XX This invention describes a novel composition comprising human telomerase
XX having at least 2000-fold (preferably at least 6000-fold) increased
XX relative purity compared with crude extract of cells from adenovirus-
XX transformed kidney cell line. The composition is useful for eliciting an
XX immune response in animals and may therefore be used as a vaccine for
XX treating diseases associated with the overexpression of telomerase e.g.
XX cancer. AA23626-223637 represent oligonucleotides used in the isolation
XX of human clone 28-1 which contains a fragment of the human telomerase
XX described in the method of the invention
XX
XX Sequence 30 BP; 6 A; 6 C; 8 G; 10 T; 0 U; 0 Other;
XX
XX Query Match 6.7%; Score 30; DB 1; Length 30;
XX Best Local Similarity 100.0%; Pred. No. 32;
XX Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 167 AAACAAAATGTCAGCTGCTGCCCGTTC 196
XX |||||||||||||||||||||||||||
XX 30 AAACAAAATGTCAGCTGCTGCCCGTTC 1
XX
XX RESULT 29
XX AA23631/c
XX ID AA23631 standard; DNA; 30 BP.
XX
XX AC AA23631;
XX
XX 07-JAN-2000 (first entry)
XX
XX Human clone 28-1 telomerase oligonucleotide oligo-14.
XX
XX Telomerase; human; immune response; cancer; vaccine; treatment; disease;
XX primer; ss.
XX Synthetic.
XX OS Homo sapiens.
XX
XX Key Location/Qualifiers
FH modified_base 1
FT /*tag= a
FT /note= "5'-biotinylated guanosine"
XX
XX US968506-A.
XX
XX 19-OCT-1999.
XX
XX 04-APR-1997; 97US-00833377.
XX
XX 04-AUG-1995; 95US-00510736.
XX
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PA (GERO-) GERON CORP.  
XX Atkinson EM, Lichtsteiner SP, Weinrich SL, Pruzan RA, Kealey JT;  
PI Vasserot AP;  
PI  
XX WPI; 1999-590379/50.  
XX  
XX Compositions comprising human telomerase, useful for treating diseases  
PT associated with overexpression of telomerase e.g. cancer.  
XX  
XX Disclosure; Col 45-46; 34pp; English.  
XX  
XX This invention describes a novel composition comprising human telomerase  
CC having at least 2000-fold (preferably at least 6000-fold) increased  
CC relative purity compared with crude extract of cells from adenovirus-  
CC transformed kidney cell line. The composition is useful for eliciting an  
CC immune response in animals and may therefore be used as a vaccine for  
CC treating diseases associated with the overexpression of telomerase e.g.  
CC cancer. AAZ23626-223637 represent oligonucleotides used in the isolation  
CC of human clone 28-1 which contains a fragment of the human telomerase  
CC described in the method of the invention  
XX  
SQ Sequence 30 BP; 8 A; 5 C; 13 G; 4 T; 0 U; 0 Other;  
  
Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 32;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 137 CCTGCCGCTTCCACCGTTTCATTCTAGAGC 166  
DB 30 CCTGCCGCTTCCACCGTTTCATTCTAGAGC 1  
  
RESULT 30  
AAS15928/C  
ID AAS15928 standard; DNA; 30 BP.  
XX  
AC AAS15928;  
XX  
DT 27-FEB-2002 (first entry)  
XX  
DE Human telomerase polynucleotide inhibitor #9.  
XX  
XX Human; telomerase; hTR; cytostatic; anti-inflammatory; adenocarcinoma;  
KW breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease;  
KW fertility; inflammatory condition; tumour; cancer; veterinary;  
KW immunosuppression; telomerase inhibitor; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
XX Key Location/Qualifiers  
FH modified\_base 1..30  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "N3'-P5' phosphoramidate linkages"  
FT  
XX WO200174136-A2.  
XX  
XX 11-OCT-2001.  
XX  
XX 30-MAR-2001; 2001WO-US010476.  
XX  
XX 31-MAR-2000; 2000US-00540119.  
XX  
XX (GERO-) GERON CORP.  
XX  
XX Gryaznov SM, Pruzan R, Weinrich SL;  
XX WPI; 2001-656955/75.  
XX  
XX New polynucleotide useful for inhibiting telomerase activity in cells, or  
PT for treating telomerase-mediated condition or disease, such as cancers,

PT tumors, Hodgkin's disease, or inflammatory conditions.  
XX  
XX Example 3; Page 32; 48pp; English.  
XX  
XX The invention relates to polynucleotide inhibitors (I) and methods for  
CC inhibiting telomerase activity. (I) are useful in inhibiting telomerase  
CC activity and proliferation of a telomerase positive cell, and in  
CC manufacturing a medicament for inhibiting telomerase activity in a cell  
CC and in treating telomerase-mediated condition or disease, such as  
CC adenocarcinoma of breast, prostate or colon, mixed cell leukaemia,  
CC Hodgkin's disease, fertility and inflammatory conditions. (I) are also  
CC useful in treating a tumour or in manufacturing a medicament for the  
CC treatment of tumour. The polynucleotide inhibitors may also be used in  
CC diagnostic assays for detecting RNA or DNA. Inhibition of telomerase  
CC activity in cells in vivo is useful in prophylactic and therapeutic  
CC methods of treating cancer and other disorders involving inappropriate  
CC expression of telomerase, and in treating veterinary proliferative  
CC diseases. Inhibition of telomerase in haematopoietic stem cells is useful  
CC for immunosuppression and for selectively down-regulating specific  
CC branches of the immune system. The present sequence represents human  
CC telomerase polynucleotide inhibitor #9, as described in the method of the  
XX invention  
XX  
SQ Sequence 30 BP; 8 A; 5 C; 13 G; 4 T; 0 U; 0 Other;  
  
Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 32;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 137 CCTGCCGCTTCCACCGTTTCATTCTAGAGC 166  
DB 30 CCTGCCGCTTCCACCGTTTCATTCTAGAGC 1  
  
RESULT 31  
AAS09476/C  
ID AAS09476 standard; DNA; 30 BP.  
XX  
AC AAS09476;  
XX  
DT 24-OCT-2001 (first entry)  
XX  
DE Antisense oligonucleotide for human telomerase, Oligo 14.  
XX  
XX Human; Telomerase; vaccine; antibody; cancer; EF2H; nucleolin;  
KW Antisense oligonucleotide; Oligo 14; ss.  
KW  
XX Homo sapiens.  
XX  
XX Key Location/Qualifiers  
FH modified\_base 1  
FT /\*tag= a  
FT /mod\_base= G  
FT /note= "G is biotinylated"  
FT  
XX US6261556-B1.  
XX  
XX 17-JUL-2001.  
XX  
XX 18-OCT-1999; 99US-00420056.  
XX  
XX 04-AUG-1995; 95US-00510736.  
PR 04-APR-1997; 97US-00833377.  
XX  
XX (GERO-) GERON CORP.  
XX  
XX Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
PI Kealey JT;  
XX WPI; 2001-450477/48.  
XX  
XX Purified human telomerase, useful for inducing immune response in  
PT animals, comprises several thousand folds increased purity compared with



CC The present sequence is that of an oligonucleotide prepared using  
 CC phosphoramidite chemistry. A nanoparticle conjugate was prepared by  
 CC joining the 5'-mercaptoalkyl oligonucleotide to gold nanoparticles. The  
 CC nanoparticle conjugate was used to enhance the sandwich amplification of  
 CC a silver signal on glass slides containing silver sports from  
 CC oligonucleotide assays performed using silver staining. This illustrated  
 CC the method of the invention, which is based on the discoveries that: (1)  
 CC gold nanoparticles coated with oligonucleotides bind to silver that has  
 CC previously been deposited on gold nanoparticle-oligonucleotide conjugates  
 CC immobilised by hybridisation on a glass substrate or plate; and (2) that  
 CC the gold-nanoparticle-oligonucleotide-silver-gold oligonucleotide  
 CC structures function as a catalyst for the further deposition of silver  
 CC ions. The discoveries were applied to a method for amplifying signal by  
 CC enhancing silver deposition in detecting systems where the formation of a  
 CC silver spot serves as a reporter for the presence of a molecule,  
 CC including proteins, nucleic acids and small molecules. The detecting  
 CC systems include detection of molecules in situ (e.g. on cells or in a  
 CC tissue sample) and assays where the target molecule is bound to a  
 CC substrate or is captured by a capture molecule. The method has special  
 CC utility in increasing the signal strength in diagnostic and screening  
 CC applications involving detection of target molecules arrayed at discrete  
 CC positions on a solid surface. It provides a means for greatly enhancing  
 CC the sensitivity of tests carried out on microarrays or microchips. The  
 CC method is simple, economical, and provides a large enhancement in signal  
 CC and sensitivity

XX Sequence 30 BP; 8 A; 5 C; 13 G; 4 T; 0 U; 0 Other;

Query Match 6.7%; Score 30; DB 1; Length 30;  
 Best Local Similarity 100.0%; Pred. No. 32;  
 Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 137 CCTGCCGCTTCCACCGCTTCTATTCTAGGC 166  
 DB 30 CCTGCCGCTTCCACCGCTTCTATTCTAGGC 1

RESULT 34  
 ABX10985/C  
 ID ABX10985 standard; DNA; 30 BP.  
 AC ABX10985;  
 XX 17-AUG-2003 (first entry)  
 DT Human telomerase antisense oligonucleotide primer oligol3.  
 DE  
 XX Telomerase; antisense; primer; oligol3; ss; cancer.  
 KW  
 XX Synthetic.  
 OS  
 FH Key Location/Qualifiers  
 FT modified\_base 1 /\*tag= a  
 FT /note= "Biotinylated"  
 FT  
 XX US6517834-B1.  
 XX 11-FEB-2003.  
 XX 20-NOV-2000; 2000US-00717828.  
 XX 04-AUG-1995; 95US-00510736.  
 PR 04-APR-1997; 97US-00833377.  
 PR 18-OCT-1999; 99US-00420056.  
 XX (GERO-) GERON CORP.  
 XX Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
 PI WPI; 2003-465598/44.  
 XX Composition useful e.g. in diagnosis of cancer comprises complex of

PT telomerase protein with telomerase RNA component.  
 XX Disclosure; Col 9; 24pp; English.  
 XX This invention relates to a purified human telomerase protein, which when  
 CC associated with telomerase RNA component has DNA polymerase activity.  
 CC Also disclosed in the specification is a method for assessing a regulator  
 CC (preferably a telomerase inhibitor or activator of telomerase involves  
 CC measuring telomerase enzymatic activity of the composition in presence of  
 CC a regulator. The telomerase protein of the invention may be used in  
 CC developing and testing assays for measuring telomerase activity which are  
 CC useful in characterising cancer and pre-cancer cells, for identifying and  
 CC testing regulators of telomerase activity in in vitro assay and for  
 CC preparing antibodies against telomerase. The mammalian telomerase protein  
 CC of the invention is at least approximately 3000 fold more pure (in terms  
 CC of telomerase activity per weight of protein) than a crude extract of  
 CC cell from adenovirus-transformed kidney cell. Purified telomerase  
 CC facilitates a thorough biochemical analysis of the enzyme's mechanism for  
 CC developing mechanism-based regulators. The present sequence represents a  
 CC human telomerase antisense oligonucleotide which has affinity to  
 CC telomerase and is used to purify the telomerase protein of the invention

XX Sequence 30 BP; 6 A; 6 C; 8 G; 10 T; 0 U; 0 Other;

Query Match 6.7%; Score 30; DB 1; Length 30;  
 Best Local Similarity 100.0%; Pred. No. 32;  
 Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 167 AAACAAAATGTCAGCTGCGCCGTTTC 196  
 DB 30 AAACAAAATGTCAGCTGCGCCGTTTC 1

RESULT 35  
 ABX10986/C  
 ID ABX10986 standard; DNA; 30 BP.  
 AC ABX10986;  
 XX 17-AUG-2003 (first entry)  
 DT Human telomerase antisense oligonucleotide primer oligol4.  
 DE  
 XX Telomerase; antisense; primer; oligol4; ss; cancer.  
 KW  
 XX Synthetic.  
 OS  
 FH Key Location/Qualifiers  
 FT modified\_base 1 /\*tag= a  
 FT /note= "Biotinylated"  
 FT  
 XX US6517834-B1.  
 XX 11-FEB-2003.  
 XX 20-NOV-2000; 2000US-00717828.  
 XX 04-AUG-1995; 95US-00510736.  
 PR 04-APR-1997; 97US-00833377.  
 PR 18-OCT-1999; 99US-00420056.  
 XX (GERO-) GERON CORP.  
 XX Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
 PI WPI; 2003-465598/44.  
 XX Composition useful e.g. in diagnosis of cancer comprises complex of  
 PT telomerase protein with telomerase RNA component.  
 XX Disclosure; Col 9; 24pp; English.



CC oligonucleotide (O) having specific affinity for (I), and collecting  
 CC protein bound to (O). The oligonucleotide comprises a retrievable label  
 CC such as biotin and contains a sequence that is specifically recognized by  
 CC telomerase protein. The oligonucleotide contains or does not contain the  
 CC sequence (TTAGGG)<sub>3</sub>. The method further comprises combining a fraction  
 CC containing telomerase protein with an anion exchange matrix, and  
 CC collecting protein that binds the matrix, combining a fraction containing  
 CC telomerase protein with a cation exchange matrix (such as a heparin  
 CC matrix), and collecting protein that binds the matrix. The method  
 CC comprises successively enriching fractions containing telomerase protein  
 CC on several different ion exchange matrices and combining a fraction  
 CC containing telomerase protein with an intermediate selectivity matrix,  
 CC collecting protein that binds the matrix, where the intermediate  
 CC selectivity matrix and separating a fraction containing the telomerase  
 CC protein by gel filtration chromatography or gradient centrifugation. The  
 CC telomerase is enriched from an extract of cells stably expressing  
 CC telomerase. This sequence represents an antisense oligonucleotide to the  
 CC RNA component of human telomerase that can be used in the purification  
 CC method of the invention.

XX Sequence 30 BP; 6 A; 6 C; 8 G; 10 T; 0 U; 0 Other;  
 SQ Query Match 6.7%; Score 30; DB 1; Length 30;  
 Best Local Similarity 100.0%; Pred. No. 32;  
 Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 167 AACACAAAATGTCAGCTGCTGCGCCGTTTC 196  
 |||||  
 Db 30 AACACAAAATGTCAGCTGCTGCGCCGTTTC 1

RESULT 38  
 ADG62873/c  
 ID ADG62873 standard; DNA; 30 BP.  
 AC  
 AC ADG62873;  
 DT 11-MAR-2004 (first entry)  
 XX Human telomerase RNA antisense oligonucleotide, oligo 13.  
 DE  
 XX  
 XX  
 XX Telomerase activity; therapy; cancer; cytostatic; antisense; ss.  
 XX Homo sapiens.  
 OS

Key Location/Qualifiers  
 modified\_base 1  
 /\*tag= a  
 /mod\_base= OTHER  
 /note= "Biotin labelled"

US2003186282-A1.  
 02-OCT-2003.  
 24-DEC-2002; 2002US-00330872.  
 04-AUG-1995; 95US-00510736.  
 04-APR-1997; 97US-00833377.  
 18-OCT-1999; 99US-00420056.  
 20-NOV-2000; 2000US-00717828.

(WEIN/) WEINRICH S L.  
 (ATKI/) ATKINSON E M.  
 (LICH/) LICHTSTEINER S P.  
 (VASS/) VASSEROT A P.  
 (PRUZ/) PRUZAN R A.

Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
 WPI; 2003-811733/76.

Identifying telomerase regulators useful for treating cancer.

XX Disclosure; SEQ ID NO 4; 22pp; English.

XX The invention relates to a method for identifying regulators of  
 CC telomerase activity that may be useful for treating cancers. The method  
 CC may be used to identify regulators e.g. antibodies, of telomerase  
 CC activity which may be useful as cancer treatments. It has been found that  
 CC found that the cells of many human cancers have telomerase activity. This  
 CC helps explain why cancer cells continue dividing without becoming  
 CC senescent. If telomerase activity in cancer cells can be inhibited, the  
 CC cancer cells are expected to reach senescence and cease dividing. The  
 CC present sequence is human telomerase antisense oligonucleotide used to  
 CC illustrate the method of the invention.

SQ Sequence 30 BP; 6 A; 6 C; 8 G; 10 T; 0 U; 0 Other;

Query Match 6.7%; Score 30; DB 1; Length 30;  
 Best Local Similarity 100.0%; Pred. No. 32;  
 Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 167 AACACAAAATGTCAGCTGCTGCGCCGTTTC 196  
 |||||  
 Db 30 AACACAAAATGTCAGCTGCTGCGCCGTTTC 1

RESULT 39  
 ADG62874/c  
 ID ADG62874 standard; DNA; 30 BP.  
 XX  
 AC ADG62874;  
 DT 11-MAR-2004 (first entry)

XX Human telomerase RNA antisense oligonucleotide, oligo 14.  
 DE  
 XX  
 XX  
 XX Telomerase activity; therapy; cancer; cytostatic; antisense; ss.  
 XX Homo sapiens.  
 OS

Key Location/Qualifiers  
 modified\_base 1  
 /\*tag= a  
 /mod\_base= OTHER  
 /note= "Biotin labelled"

US2003186282-A1.  
 02-OCT-2003.  
 24-DEC-2002; 2002US-00330872.  
 04-AUG-1995; 95US-00510736.  
 04-APR-1997; 97US-00833377.  
 18-OCT-1999; 99US-00420056.  
 20-NOV-2000; 2000US-00717828.

(WEIN/) WEINRICH S L.  
 (ATKI/) ATKINSON E M.  
 (LICH/) LICHTSTEINER S P.  
 (VASS/) VASSEROT A P.  
 (PRUZ/) PRUZAN R A.

Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
 WPI; 2003-811733/76.

Identifying telomerase regulators useful for treating cancer.

Disclosure; SEQ ID NO 5; 22pp; English.

XX The invention relates to a method for identifying regulators of  
 CC telomerase activity that may be useful for treating cancers. The method  
 CC may be used to identify regulators e.g. antibodies, of telomerase

CC activity which may be useful as cancer treatments. It has been found that  
CC found that the cells of many human cancers have telomerase activity. This  
CC helps explain why cancer cells continue dividing without becoming  
CC senescent. If telomerase activity in cancer cells can be inhibited, the  
CC cancer cells are expected to reach senescence and cease dividing. The  
CC present sequence is human telomerase antisense oligonucleotide used to  
CC illustrate the method of the invention.

XX  
SQ Sequence 30 BP; 8 A; 5 C; 13 G; 4 T; 0 U; 0 Other;

Query Match 6.7%; Score 30; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 32;  
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 137 CCTGCCCGCTTCACCGTTTCATTCTAGAGC 166  
Db 30 CCTGCCCGCTTCACCGTTTCATTCTAGAGC 1

RESULT 40

AAV63647/C

ID AAV63647 standard; DNA; 30 BP.

XX AAV63647;

XX 15-FEB-1999 (first entry)

XX Antisense oligonucleotide 5 for human telomerase RNA component.

XX Human; telomerase RNA component; anticancer therapy; purification; assay;  
XX vaccine; cancer; antisense oligonucleotide; ss.

XX Synthetic.

XX Homo sapiens.

XX Key Location/Qualifiers  
FT modified\_base 1  
FT /\*tag= a  
FT /note= "biotinylated"

XX W09845450-A1.

XX 15-OCT-1998.

XX 04-APR-1997; 97WO-US006012.

XX 04-APR-1997; 97WO-US006012.

XX (GERO-) GERON CORP.

XX Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
XX Kealey JT;

XX WPI; 1998-594485/50.

XX Purification of telomerase on affinity material - useful for, e.g.  
XX diagnosis and treatment of cancer.

XX Example 3; Page 47; 76pp; English.

XX The present sequence represents an antisense oligonucleotide directed  
CC against the human telomerase RNA component gene sequences. The  
CC oligonucleotide can be used as an affinity agent in the methods of the  
CC invention, which are used to purify human telomerase. The methods involve  
CC the use of several sequential steps, including the use of two matrices  
CC that bind molecules bearing negative charges, a matrix that binds  
CC molecules bearing positive charges, an affinity purification step and a  
CC size separation. Telomerase is a particular target of anticancer  
CC therapies, and is useful in assays for characterizing (pre)cancerous  
CC cells. Telomerase can also be used to screen for specific modulators, for  
CC biochemical analysis of its activity, and in preparation of antibodies.  
CC Fragments of telomerase, or nucleic acid encoding them, are used in  
CC vaccines, and for treating over expression of telomerase, particularly in

CC cancer

XX Sequence 30 BP; 4 A; 11 C; 9 G; 6 T; 0 U; 0 Other;

Query Match 6.3%; Score 28.4; DB 1; Length 30;  
Best Local Similarity 96.7%; Pred. No. 45;  
Matches 29; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 412 GAGCTGTGGGACGTGCACCCAGGACTCGGC 441  
Db 30 GAGCTATGGGACGTGCACCCAGGACTCGGC 1

RESULT 41

AAZ23629/C

ID AAZ23629 standard; DNA; 30 BP.

XX AAZ23629;

XX 07-JAN-2000 (first entry)

XX Human clone 28-1 telomerase oligonucleotide oligo-5.

XX Telomerase; human; immune response; cancer; vaccine; treatment; disease;  
XX primer; ss.

XX Synthetic.

XX Homo sapiens.

XX Key Location/Qualifiers  
FT modified\_base 1  
FT /\*tag= a  
FT /note= "5'-biotinylated guanosine"

XX US95968506-A.

XX 19-OCT-1999.

XX 04-APR-1997; 97US-00833377.

XX 04-AUG-1995; 95US-00510736.

XX (GERO-) GERON CORP.

XX Atkinson EM, Lichtsteiner SP, Weinrich SL, Pruzan RA, Kealey JT;  
XX Vasserot AP;

XX WPI; 1999-590379/50.

XX Compositions comprising human telomerase, useful for treating diseases  
XX associated with overexpression of telomerase e.g. cancer.

XX Disclosure; Col 43-44; 34pp; English.

XX This invention describes a novel composition comprising human telomerase  
CC having at least 2000-fold (preferably at least 6000-fold) increased  
CC relative purity compared with crude extract of cells from adenovirus-  
CC transformed kidney cell line. The composition is useful for eliciting an  
CC immune response in animals and may therefore be used as a vaccine for  
CC treating diseases associated with the overexpression of telomerase e.g.  
CC cancer. AAZ23626-223637 represent oligonucleotides used in the isolation  
CC of human clone 28-1 which contains a fragment of the human telomerase  
CC described in the method of the invention

XX Sequence 30 BP; 4 A; 11 C; 9 G; 6 T; 0 U; 0 Other;

Query Match 6.3%; Score 28.4; DB 1; Length 30;  
Best Local Similarity 96.7%; Pred. No. 45;  
Matches 29; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 412 GAGCTGTGGGACGTGCACCCAGGACTCGGC 441  
Db 30 GAGCTATGGGACGTGCACCCAGGACTCGGC 1

```
RESULT 42
ID AAS09474/c
XX AAS09474 standard; DNA; 30 BP.
AC AAS09474;
XX
XX
DT 24-OCT-2001 (first entry)
XX
DE Antisense oligonucleotide for human telomerase, Oligo 5.
XX
KW Human; Telomerase; vaccine; antibody; cancer; EF2H; nucleolin;
KW antisense oligonucleotide; Oligo 5; ss.
XX
OS Homo sapiens.
XX
XX
FH Key Location/Qualifiers
FT modified_base 1
FT /*tag= a
FT /mod_base= G
FT /note= "G is biotinylated"
XX
XX US6261556-B1.
XX
XX 17-JUL-2001.
XX
XX 18-OCT-1999; 99US-00420056.
XX
XX 04-AUG-1995; 95US-00510736.
XX 04-APR-1997; 97US-00833377.
XX
XX (GERO-) GERON CORP.
XX
XX
XX Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;
XX Kealey JT;
XX
XX WPI; 2001-450477/48.
XX
XX Purified human telomerase, useful for inducing immune response in
XX animals, comprises several thousand folds increased purity compared with
XX cytoplasmic crude cell preparations.
XX
XX Disclosure; Col 18; 29pp; English.
XX
XX The sequence represents a biotinylated antisense oligonucleotide used in
XX the purification of human telomerase. The invention relates to a purified
XX human telomerase core enzyme protein comprising 2000-fold increased
XX purity compared with a crude extract of cells from adenovirus-transformed
XX kidney cell line (293 cells) and when associated with telomerase RNA
XX component has DNA polymerase activity and a molecular weight of 200-2000
XX kilo Daltons (kDa). The purified telomerase is useful for inducing a
XX humoral or cell-mediated immune response in an animal. Purified
XX telomerase or immunogenic fragments are useful as vaccines for treating
XX diseases associated with over-expression of telomerase, such as cancer
XX and for producing antibodies that recognize telomerase, which are useful
XX as affinity agents in isolating the proteins and for detecting the
XX presence of proteins in a sample, such as cell or tissue. Identification
XX of telomerase aids in diagnosis of cancer or pre-cancerous states.
XX Telomerase and/or telomerase associated proteins are also useful for
XX screening compounds to identify agents that alter the association of
XX telomerase-associated proteins, such as nucleolin or EF2H with telomerase
XX
XX Sequence 30 BP; 4 A; 11 C; 9 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 6.3%; Score 28.4; DB 1; Length 30;
XX Best Local Similarity 96.7%; Pred. No. 45;
XX Matches 29; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 412 GAGCTGTGGGACGTGCACCCAGGACTCGGC 441
XX ||||| ||||| ||||| ||||| ||||| ||||| |||||
XX 30 GAGCTATGGGACGTGCACCCAGGACTCGGC 1
XX
XX RESULT 44
XX ADC35650/c
XX ID ADC35650 standard; DNA; 30 BP.
```

```
RESULT 43
ID ABX10984/c
XX ABX10984 standard; DNA; 30 BP.
XX
XX
AC ABX10984;
XX
XX
DT 17-AUG-2003 (first entry)
XX
DE Human telomerase antisense oligonucleotide primer oligos.
XX
KW Telomerase; antisense; primer; oligo5; ss; cancer.
XX
OS Synthetic.
XX
XX
FH Key Location/Qualifiers
FT modified_base 1
FT /*tag= a
FT /note= "Biotinylated"
XX
XX US6517834-B1.
XX
XX 11-FEB-2003.
XX
XX 20-NOV-2000; 2000US-00717828.
XX
XX 04-AUG-1995; 95US-00510736.
XX 04-APR-1997; 97US-00833377.
XX 18-OCT-1999; 99US-00420056.
XX
XX (GERO-) GERON CORP.
XX
XX
XX Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;
XX WPI; 2003-465598/44.
XX
XX Composition useful e.g. in diagnosis of cancer comprises complex of
XX telomerase protein with telomerase RNA component.
XX
XX Claim 13; Col 9; 24pp; English.
XX
XX This invention relates to a purified human telomerase protein, which when
XX associated with telomerase RNA component has DNA polymerase activity,
XX Also disclosed in the specification is a method for assessing a regulator
XX (preferably a telomerase inhibitor or activator of telomerase involves
XX measuring telomerase enzymatic activity of the composition in presence of
XX a regulator. The telomerase protein of the invention may be used in
XX measuring and testing assays for measuring telomerase activity which are
XX useful in characterizing cancer and pre-cancer cells, for identifying and
XX testing regulators of telomerase activity in in vitro assay and for
XX preparing antibodies against telomerase. The mammalian telomerase protein
XX of the invention is at least approximately 3000 fold more pure (in terms
XX of telomerase activity per weight of protein) than a crude extract of
XX cell from adenovirus-transformed kidney cell. Purified telomerase
XX facilitates a thorough biochemical analysis of the enzyme's mechanism for
XX developing mechanism-based regulators. The present sequence represents a
XX human telomerase antisense oligonucleotide which has affinity to
XX telomerase and is used to purify the telomerase protein of the invention
XX
XX Sequence 30 BP; 4 A; 11 C; 9 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 6.3%; Score 28.4; DB 1; Length 30;
XX Best Local Similarity 96.7%; Pred. No. 45;
XX Matches 29; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 412 GAGCTGTGGGACGTGCACCCAGGACTCGGC 441
XX ||||| ||||| ||||| ||||| ||||| ||||| |||||
XX 30 GAGCTATGGGACGTGCACCCAGGACTCGGC 1
XX
XX RESULT 44
XX ADC35650/c
XX ID ADC35650 standard; DNA; 30 BP.
```



XX ADC35650;  
XX 18-DEC-2003 (first entry)  
XX Human telomerase RNA component antisense oligonucleotide seq id 3.  
DE mammalian telomerase protein; telomerase purification; telomere;  
XX anion exchange matrix; cation exchange matrix; selectivity matrix;  
KW gel filtration chromatography; gradient centrifugation;  
KW antisense oligonucleotide; ss.  
XX Homo sapiens.  
XX US6545133-B1.  
XX 08-APR-2003.  
XX 20-NOV-2000; 2000US-00717829.  
XX 04-AUG-1995; 95US-00510736.  
XX 04-APR-1997; 97US-00833377.  
XX 18-OCT-1999; 99US-00420056.  
XX (GERO-) GERON CORP.  
XX Weinrich SL, Atkinson EM, Lichtsteiner SP, Vaasserot AP, Pruzan RA;  
XX WPI; 2003-742824/70.  
XX Obtaining telomerase, by preparing enriched solution from cell expressing  
PT telomerase, combining the solution with oligonucleotide having specific  
PT affinity for the protein and collecting protein bound to oligonucleotide.  
XX Claim 4; SEQ ID NO 3; 24pp; English.  
XX The invention describes a method of obtaining mammalian telomerase  
CC protein (I). The method involves preparing enriched solution (ES) from a  
CC cell expressing telomerase where the component of (I) in ES is separated  
CC from other proteins expressed by cell by combining ES with  
CC oligonucleotide (O) having specific affinity for (I), and collecting  
CC protein bound to (O). The oligonucleotide comprises a retrievable label  
CC such as biotin and contains a sequence that is specifically recognized by  
CC telomerase protein. The oligonucleotide contains or does not contain the  
CC sequence (TTAGGG)<sub>3</sub>. The method further comprises combining a fraction  
CC containing telomerase protein with an anion exchange matrix, and  
CC collecting protein that binds the matrix, combining a fraction containing  
CC telomerase protein with a cation exchange matrix (such as a heparin  
CC matrix), and collecting protein that binds the matrix. The method  
CC comprises successively enriching fractions containing telomerase protein  
CC on several different ion exchange matrices and combining a fraction  
CC containing telomerase protein with an intermediate selectivity matrix,  
CC collecting protein that binds the matrix, where the intermediate  
CC selectivity matrix and separating a fraction containing the telomerase  
CC protein by gel filtration chromatography or gradient centrifugation. The  
CC telomerase is enriched from an extract of cells stably expressing  
CC telomerase. This sequence represents an antisense oligonucleotide to the  
CC RNA component of human telomerase that can be used in the purification  
CC method of the invention.  
XX SQ Sequence 30 BP; 4 A; 11 C; 9 G; 6 T; 0 U; 0 Other;  
Query Match 6.3%; Score 28.4; DB 1; Length 30;  
Best Local Similarity 96.7%; Pred. No. 45;  
Matches 29; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 412 GAGCTGTGGGACGTGCACCCAGGACTCGGC 441  
Db |||||  
30 GAGCTATGGGACGTGCACCCAGGACTCGGC 1  
RESULT 45  
ADG62872/c

ID ADG62872 standard; DNA; 30 BP.  
XX AC ADG62872;  
XX 11-MAR-2004 (first entry)  
XX Human telomerase RNA antisense oligonucleotide, oligo 5.  
DE Telomerase activity; therapy; cancer; cytostatic; antisense; ss.  
XX KW Telomerase activity; therapy; cancer; cytostatic; antisense; ss.  
XX OS Homo sapiens.  
XX Key Location/Qualifiers  
FT modified\_base 1 /\*tag= a  
FT FT /mod\_base= OTHER  
FT FT /noted= "Biotin labelled"  
XX US2003186282-A1.  
XX 02-OCT-2003.  
XX 24-DEC-2002; 2002US-00330872.  
XX 04-AUG-1995; 95US-00510736.  
XX 04-APR-1997; 97US-00833377.  
XX 18-OCT-1999; 99US-00420056.  
XX 20-NOV-2000; 2000US-00717828.  
XX (WEIN/) WEINRICH S L.  
XX (ATK/) ATKINSON E M.  
XX (LICH/) LICHTSTEINER S P.  
XX (VASS/) VASSEROT A P.  
XX (PRUZ/) PRUZAN R A.  
XX Weinrich SL, Atkinson EM, Lichtsteiner SP, Vaasserot AP, Pruzan RA;  
XX WPI; 2003-811733/76.  
XX Identifying telomerase regulators useful for treating cancer.  
XX Claim 11; SEQ ID NO 3; 22pp; English.  
XX The invention relates to a method for identifying regulators of  
CC telomerase activity that may be useful for treating cancers. The method  
CC may be used to identify regulators e.g. antibodies, of telomerase  
CC activity which may be useful as cancer treatments. It has been found that  
CC found that the cells of many human cancers have telomerase activity. This  
CC helps explain why cancer cells continue dividing without becoming  
CC senescent. If telomerase activity in cancer cells can be inhibited, the  
CC cancer cells are expected to reach senescence and cease dividing. The  
CC present sequence is human telomerase antisense oligonucleotide used to  
CC illustrate the method of the invention.  
XX SQ Sequence 30 BP; 4 A; 11 C; 9 G; 6 T; 0 U; 0 Other;  
Query Match 6.3%; Score 28.4; DB 1; Length 30;  
Best Local Similarity 96.7%; Pred. No. 45;  
Matches 29; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 412 GAGCTGTGGGACGTGCACCCAGGACTCGGC 441  
Db |||||  
30 GAGCTATGGGACGTGCACCCAGGACTCGGC 1  
RESULT 46  
AA90787  
ID AA90787 standard; DNA; 28 BP.  
XX AC AA90787;  
XX 13-JAN-2000 (first entry)  
XX

DE Human telomerase RNA specific PCR primer-1.  
 XX PCR primer; human telomerase RNA; hTR; amplify; human staufen cDNA;  
 KW hStau; synthesised; random hexamer primer;  
 KW Superscript II reverse transcriptase; ss.  
 XX Synthetic.  
 OS Homo sapiens.  
 XX WO9951255-A1.  
 XX 14-OCT-1999.  
 XX 06-APR-1999; 99WO-US007533.  
 XX 06-APR-1998; 98US-0080783P.  
 XX (UYUJ ) UNIV JOHNS HOPKINS SCHOOL MEDICINE.  
 XX Greider CW, Le S;  
 XX WPI; 1999-620168/53.  
 XX Human staufen polypeptide useful in methods for identifying telomerase  
 PT inhibitors.  
 XX Disclosure; Page 15; 50pp; English.  
 CC The present sequence is a PCR primer specific to human telomerase RNA  
 CC (hTR). It is used to amplify human staufen (hStau) cDNA synthesised using  
 CC random hexamer primers and Superscript II reverse transcriptase  
 XX Sequence 28 BP; 2 A; 4 C; 13 G; 9 T; 0 U; 0 Other;

Query Match 6.2%; Score 28; DB 1; Length 28;  
 Best Local Similarity 100.0%; Pred. No. 44;  
 Matches 28; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 17 GCCTGGGAGGGGTGGTGGCCATTTTGG 44  
 |||||  
 DB 1 GCCTGGGAGGGGTGGTGGCCATTTTGG 28

RESULT 47  
 AA41193/c  
 ID AA41193 standard; DNA; 27 BP.  
 XX AC AA41193;  
 XX DT 08-OCT-1998 (first entry)  
 XX RNA component of human telomerase (hTR) amplifying reverse primer.  
 XX RNA component; human telomerase; antisense oligonucleotide; infection;  
 KW neuroblastoma; bladder cancer; colon cancer; prostate cancer; cancer;  
 KW contraception; sterilisation; immunosuppression; therapeutic; hTR;  
 KW immune system down-regulation; anti-inflammatory therapy; RT-PCR; primer;  
 KW ss.  
 XX Synthetic.  
 OS Homo sapiens.  
 XX WO9828442-A1.  
 XX 02-JUL-1998.  
 XX 19-DEC-1997; 97WO-US023619.  
 XX 20-DEC-1996; 96US-00770564.  
 XX 20-DEC-1996; 96US-00770565.  
 XX (GERO-) GERON CORP.

PI Kim NW, Wu F, Kealey JT, Pruzan R, Weinrich SL;  
 XX WPI; 1998-377670/32.  
 XX New polynucleotide(s) anti:sense to human telomerase - used for detecting  
 PT or inhibiting human telomerase, e.g. for treating cancers, contraception,  
 PT immuno-suppression or treating infection.  
 XX Claim 65; Page 75; 80pp; English.  
 XX This primer is used for the RT-PCR amplification of an RNA component of  
 CC human telomerase (hTR). This is used in the method of invention of  
 CC determining the amount of hTR in a sample. The method comprises  
 CC amplifying a sequence of hTR and a control polynucleotide from a sample  
 CC and determining an amount of amplified hTR and an amount of amplified  
 CC control polynucleotide. The amount of amplified hTR is normalised with  
 CC respect to the amount of amplified control polynucleotide to provide a  
 CC normalised amount of hTR which provides a determination of the amount of  
 CC hTR in the sample. The invention provides antisense oligonucleotides to  
 CC the hTR which may specifically be used for detection of an RNA component  
 CC of human telomerase in a sample. This is useful for diagnosing cancer  
 CC (especially neuroblastoma, bladder, colon and prostate cancer), and  
 CC providing prognosis for a cancer patient. The antisense oligonucleotides  
 CC can be used for inhibiting telomerase activity in both cultured cells and  
 CC in cells in vivo. They can be used in therapeutics for treating or  
 CC preventing cancer, for contraception or sterilisation, for  
 CC immunosuppression, and for selectively down-regulating specific branches  
 CC of the immune system, e.g. a specific subset of T-cells, in anti-  
 CC inflammatory therapies or for treating infections by, e.g. yeast,  
 CC parasites or fungi  
 XX Sequence 27 BP; 7 A; 3 C; 10 G; 7 T; 0 U; 0 Other;

Query Match 6.0%; Score 27; DB 1; Length 27;  
 Best Local Similarity 100.0%; Pred. No. 51;  
 Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 144 CCTTCCACCGTTCAATCTAGAGCAAC 170  
 |||||  
 DB 27 CCTTCCACCGTTCAATCTAGAGCAAC 1

RESULT 48  
 AA77130/c  
 ID AA77130 standard; DNA; 27 BP.  
 XX AC AA77130;  
 XX DT 03-AUG-1999 (first entry)  
 XX PCR primer hTR445 comp.  
 XX Cellular senescence; modulator; GC6 gene; senescent gene expression;  
 KW pGC6; human; PCR primer; ss.  
 XX Synthetic.  
 XX WO9925878-A2.  
 XX 27-MAY-1999.  
 XX 19-NOV-1998; 98WO-US024996.  
 XX 19-NOV-1997; 97US-00974180.  
 XX (GERO-) GERON CORP.  
 XX Funk W;  
 XX WPI; 1999-347496/29.  
 XX New human GC6 gene, useful for identifying agents for treating diseases  
 PT and/or conditions associated with cell senescence.

XX Example 5; Page 74; 79pp; English.

XX The invention relates to methods for modulating and identifying cellular

CC senescence. Recombinant expression vectors comprising a recombinant

CC polynucleotide corresponding to a polynucleotide in a human GC6 gene, are

CC useful for altering senescent gene expression. The vectors and host cells

CC comprising the vectors are useful for identifying agents that prevent or

CC modulate senescent gene expression. The polynucleotides are useful for

CC producing the protein, pGC6 and nucleic acid derivatives. The proteins

CC encoded are useful for raising antibodies specific for pGC6, which are

CC useful for isolating pGC6, and for detecting cells comprising pGC6 in

CC complex cell mixtures. The characterization of the polynucleotides enable

CC the identification of therapeutic agents that identify and distinguish

CC between young and senescent cells. This enables treatment of aging

CC diseases induced or exacerbated by cellular senescence

XX

SQ Sequence 27 BP; 4 A; 6 C; 11 G; 6 T; 0 U; 0 Other;

Query Match 6.0%; Score 27; DB 1; Length 27;

Best Local Similarity 100.0%; Pred. No. 51;

Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 425 TGCACCCAGGACTCGGCTCACACATGC 451

Db 27 TGCACCCAGGACTCGGCTCACACATGC 1

RESULT 49

ABA95497/C

ID ABA95497 standard; DNA; 27 BP.

AC ABA95497;

XX

XX 12-MAR-2002 (first entry)

DE Human telomerase RNA, hTR, antisense PCR primer.

XX

XX Human; telomerase RNA; PCR primer; cancer; breast; ovarian; stomach;

KW colon; hTR; ss.

XX

XX Homo sapiens.

OS

XX EP1158055-A1.

FN

XX

XX 28-NOV-2001.

PD

XX

XX 26-MAY-2000; 2000EP-00111370.

XX

XX 26-MAY-2000; 2000EP-00111370.

PR

XX (CHEN/) CHEN X Q.

PA (STROU/) STROUN M.

PA (ANKER/) ANKER P.

XX

XX Chen XQ, Stroun M, Anker P;

PI

XX WPI; 2002-099090/14.

DR

XX

XX Accurate, reliable diagnosis and/or prognosis of cancer, e.g. breast

PT cancer, by analyzing the RNA components of telomerase in plasma or serum.

XX

XX Example; Col 3; 6pp; French.

PS

XX The present invention relates to a method for diagnosing and/or

CC monitoring the evolution of cancers. The method comprises analysing

CC enzyme telomerase RNA in blood plasma or serum. The method is typically

CC used for diagnosing breast, ovarian, stomach or colon cancer and/or

CC monitoring the evolution of the cancers after treatment by chemotherapy

CC or operations. The present sequence is a PCR primer for human telomerase

CC RNA (hTR), which was used in the example from the present invention

XX

SQ Sequence 27 BP; 7 A; 3 C; 10 G; 7 T; 0 U; 0 Other;

Query Match 6.0%; Score 27; DB 1; Length 27;

Best Local Similarity 100.0%; Pred. No. 51;

Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 144 CCTTCACCCGTTTCATTTCTAGAGCAAAAC 170

Db 27 CCTTCACCCGTTTCATTTCTAGAGCAAAAC 1

RESULT 50

AAZ07264/C

ID AAZ07264 standard; DNA; 30 BP.

XX

AC AAZ07264;

XX

XX 22-OCT-1999 (first entry)

DT

XX Human telomerase RNA gene (hTR) specific primer hTR14.

DE

XX Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;

KW gene therapy; thymidine kinase gene; anticancer therapy; human;

KW PCR primer; ss.

XX

OS Synthetic.

OS Homo sapiens.

XX

XX WO9938964-A2.

FN

XX

PD 05-AUG-1999.

XX

XX 29-JAN-1999; 99WO-GB000308.

PF

XX

XX 29-JAN-1998; 98GB-00001902.

PR

XX (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.

XX

XX Keith WN;

PI

XX WPI; 1999-479183/40.

DR

XX

XX Mouse and human telomerase RNA gene promoters, useful for tumor specific

PT gene therapy.

XX

XX Disclosure; Fig 6; 109pp; English.

XX

XX The invention relates to promoter regions from mouse and human telomerase

CC RNA (TR) component genes. The TR gene promoter can be linked to a

CC heterologous gene, especially a gene encoding a cytotoxin, for therapy of

CC cancer, especially neoplasias. The telomerase is necessary for the

CC unrestricted proliferative capacity of many human cancers. Mutation or

CC dysregulation of the telomerase repression pathway may cause reactivation

CC or upregulation of telomerase expression in cancer. Substances,

CC identified in the methods, can be used to block transcription from the TR

CC gene promoter through interaction of the 5' regulatory sequences. These

CC substances, e.g. antisense oligonucleotides, transcription factors,

CC peptide nucleic acids and factors that disrupt signal transduction, are

CC useful for cancer therapy. In particular, gene therapy vectors

CC (especially pGT62-codAupp) comprising the promoter and a viral thymidine

CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that

CC neoplasia can be controlled or treated. Direct down-regulation of

CC telomerase RNA gene through manipulation of transcription factors may be

CC effective anticancer therapy and the cloning of the hTR gene promoter

CC allows the analysis of therapeutic molecules which modulate hTR promoter

CC activity. Sequences AAZ07623-80 represents PCR primers for amplifying

CC human TR gene (hTR) promoter sequence

XX

SQ Sequence 30 BP; 5 A; 8 C; 8 G; 9 T; 0 U; 0 Other;

Query Match 5.9%; Score 26.8; DB 1; Length 30;

Best Local Similarity 93.3%; Pred. No. 61;

Matches 28; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 46 CTAACCTTAAGGAGGCGTAGGCGCC 75  
 Db 30 CTAACCTTAAGGAGGCGTAGGATCC 1

## RESULT 51

AAT10309  
 ID AAT10309 standard; DNA; 28 BP.  
 XX  
 AC AAT10309;  
 XX  
 DT 10-SEP-1996 (first entry)  
 XX  
 DE RNA component of human telomerase PRINS forward primer.  
 XX  
 KW RNA component; human; telomerase; forward primer; PRINS;  
 KW recombinant production; synthesis; mutant; detection; mammalian;  
 KW identification; modulating agent; neoplastic condition;  
 KW transcriptional regulatory sequence; gene therapy; disease;  
 KW primed in situ labelling; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9601835-A1.  
 XX  
 PD 25-JAN-1996.  
 XX  
 PF 06-JUL-1995; 95WO-US008530.  
 XX  
 PR 07-JUL-1994; 94US-00272102.  
 PR 27-OCT-1994; 94US-00330123.  
 PR 07-JUN-1995; 95US-00472802.  
 PR 07-JUN-1995; 95US-00482115.  
 XX  
 PA (GERO-) GERON CORP.  
 XX  
 PI Villeponteau B, Feng J, Funk W, Andrews WH;  
 XX  
 DR WPI; 1996-097581/10.

XX RNA component of mammalian telomerase, esp. human - useful in identifying  
 XX e.g. candidate telomerase-modulating agents.  
 XX  
 PS Example 13; Page 91; 114pp; English.

XX The present sequence, a forward primer for the RNA component of human  
 CC telomerase (RCHT), was used in a primed in situ labelling (PRINS)  
 CC procedure. The RCHT can be used in the recombinant prodn. of an active  
 CC telomerase mol., capable of adding sequences to chromosomal DNA  
 CC telomeres, and in the synthesis of mutant sequences for the detection of  
 CC mutant mammalian telomerase RNA component polynucleotides. The RCHT may  
 CC also be used in the identification of telomerase modulating agents, and  
 CC in the detection of telomerase related, or neoplastic conditions in a  
 CC patient. Polynucleotides of at least 25 consecutive nucleotides  
 CC identical, or complementary to the RCHT sequence linked to heterologous  
 CC transcriptional regulatory sequences, can be used for the gene therapy of  
 CC human diseases

XX Sequence 28 BP; 2 A; 3 C; 13 G; 10 T; 0 U; 0 Other;

Query Match 5.9%; Score 26.4; DB 1; Length 28;  
 Best Local Similarity 96.4%; Pred. No. 60;  
 Matches 27; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 17 GCTGGAGGGGTGGTGGCCATTTTGG 44  
 Db 1 GCCTGGAGGGGTGGTGGCTATTTTGG 28

## RESULT 52

AAT1044/c  
 ID AAT1044 standard; DNA; 26 BP.  
 XX

AC AAT1044;  
 XX  
 DT 02-JUL-1996 (first entry)  
 XX  
 DE Primer for production of telomerase antisense oligonucleotide.  
 XX  
 KW Telomerase; mammal; antisense; triplex forming oligonucleotide; plasmid;  
 KW probe; primer; ribozyme; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9601614-A2.  
 XX  
 PD 25-JAN-1996.  
 XX  
 PF 07-JUL-1995; 95WO-US008620.  
 XX  
 PR 07-JUL-1994; 94US-00272102.  
 PR 27-OCT-1994; 94US-00330123.  
 PR 13-FEB-1995; 95US-00387524.  
 PR 07-JUN-1995; 95US-00485778.  
 XX  
 PA (COLD-) COLD SPRING HARBOR LAB.  
 PA (GERO-) GERON CORP.  
 XX  
 PI Andrews WH, Avillion AA, Feng J, Funk W, Greider C, Marhuenda MA;  
 PI Villeponteau B;  
 XX  
 DR WPI; 1996-097428/10.

XX RNA components of (non)human mammalian telomerase(s) - useful in studying  
 XX cell senescence and immortalisation.  
 XX  
 PS Example 8; Page 53; 85pp; English.

XX The RNA components of (non) human mammalian telomerase(s) especially from  
 CC mouse, rat and chinese hamster are all claimed. Antisense  
 CC oligonucleotides can be used to block the activity of the telomerase;  
 CC probes and primers can be used in detection; vectors and host cells  
 CC transformed with the isolated telomerase genes can be used for production  
 CC of telomerases; RNA and DNA ribozymes and triplex forming  
 CC oligonucleotides directed against the telomerase genes can be used  
 CC therapeutically as can plasmids. A mouse which lacks the telomerase gene  
 CC (also claimed) can be used for study of telomere regulation in vivo, and  
 CC the role it plays in immortalisation. Three primers (AAT11040, AAT11043,  
 CC AAT11044) were used to produce antisense oligonucleotides which were then  
 CC used to produce antisense expression plasmids. AAT11040 was used  
 CC alongside both AAT11043 and AAT11044 to produce two different antisense  
 CC molecules

XX Sequence 26 BP; 7 A; 3 C; 9 G; 7 T; 0 U; 0 Other;

Query Match 5.8%; Score 26; DB 1; Length 26;  
 Best Local Similarity 100.0%; Pred. No. 59;  
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTTCATTCTAGACAAAC 170  
 Db 26 CTTCCACCGTTTCATTCTAGACAAAC 1

RESULT 53  
 AAT10304/c  
 ID AAT10304 standard; DNA; 26 BP.  
 XX  
 AC AAT10304;  
 XX

DT 10-SEP-1996 (first entry)

XX RNA component of human telomerase nested PCR primer R3c.  
 DE  
 XX RNA component; human; telomerase; polymerase chain reaction;  
 KW recombinant production; synthesis; mutant; detection; mammalian;

KW identification; modulating agent; neoplastic condition;  
 KW transcriptional regulatory sequence; gene therapy; disease; PCR primer;  
 KW ss.  
 XX Synthetic.  
 XX WO9601835-A1.  
 XX  
 XX PD 25-JAN-1996.  
 XX PF 06-JUL-1995; 95WO-US008530.  
 XX PR 07-JUL-1994; 94US-00272102.  
 XX PR 27-OCT-1994; 94US-00330123.  
 XX PR 07-JUN-1995; 95US-00472802.  
 XX PR 07-JUN-1995; 95US-00482115.  
 XX PA (GERO-) GERON CORP.  
 XX PI Villeponteau B, Feng J, Funk W, Andrews WH;  
 XX WPI; 1996-097581/10.  
 XX RNA component of mammalian telomerase, esp. human - useful in identifying  
 PT e.g. candidate telomerase-modulating agents.  
 XX Example 10; Page 82; 114pp; English.  
 XX The present sequence, a nested PCR primer for the RNA component of human  
 CC telomerase (RCHT), was used in a 5' RACE procedure. The RCHT can be used  
 CC in the recombinant prodn. of an active telomerase mol., capable of adding  
 CC sequences to chromosomal DNA telomeres, and in the synthesis of mutant  
 CC polynucleotides. The RCHT may also be used in the identification of  
 CC telomerase modulating agents, and in the detection of telomerase related,  
 CC or neoplastic conditions in a patient. Polynucleotides of at least 25  
 CC consecutive nucleotides identical, or complementary to the RCHT sequence  
 CC linked to heterologous transcriptional regulatory sequences, can be used  
 CC for the gene therapy of human diseases  
 XX SQ Sequence 26 BP; 7 A; 3 C; 9 G; 7 T; 0 U; 0 Other;  
 Query Match 5.8%; Score 26; DB 1; Length 26;  
 Best Local Similarity 100.0%; Pred. No. 59;  
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 145 CTTCCACCGTTCATCTAGAGCAAC 170  
 Db |||||  
 26 CTTCCACCGTTCATCTAGAGCAAC 1  
 RESULT 54  
 AAT10299/C  
 ID AAT10299 standard; DNA; 26 BP.  
 XX AC AAT10299;  
 XX DT 09-SEP-1996 (first entry)  
 XX DE RNA component of human telomerase antisense plasmid PCR primer R3C.  
 XX RNA component; human; telomerase; lung fibroblast; cell line WI-38;  
 KW recombinant production; synthesis; mutant; detection; mammalian;  
 KW identification; modulating agent; neoplastic condition;  
 KW transcriptional regulatory sequence; gene therapy; disease;  
 KW polymerase chain reaction; antisense plasmid; PCR primer; ss.  
 XX Synthetic.  
 XX OS WO9601835-A1.  
 XX PN 25-JAN-1996.  
 XX PD

PF 06-JUL-1995; 95WO-US008530.  
 XX 07-JUL-1994; 94US-00272102.  
 XX 27-OCT-1994; 94US-00330123.  
 XX 07-JUN-1995; 95US-00472802.  
 XX 07-JUN-1995; 95US-00482115.  
 XX (GERO-) GERON CORP.  
 XX Villeponteau B, Feng J, Funk W, Andrews WH;  
 XX WPI; 1996-097581/10.  
 XX RNA component of mammalian telomerase, esp. human - useful in identifying  
 PT e.g. candidate telomerase-modulating agents.  
 XX Example 8; Page 80; 114pp; English.  
 XX The present sequence is a PCR primer for a RNA component of human  
 CC telomerase (RCHT), antisense plasmid. RCHT was derived from a genomic DNA  
 CC library obtd. from the human lung fibroblast cell line WI-38. The RCHT  
 CC can be used in the recombinant prodn. of an active telomerase mol.,  
 CC capable of adding sequences to chromosomal DNA telomeres, and in the  
 CC synthesis of mutant sequences for the detection of mutant mammalian  
 CC telomerase RNA component polynucleotides. The RCHT may also be used in  
 CC the identification of telomerase modulating agents, and in the detection  
 CC of telomerase related, or neoplastic conditions in a patient.  
 CC Polynucleotides of at least 25 consecutive nucleotides identical, or  
 CC complementary to the RCHT sequence linked to heterologous transcriptional  
 CC regulatory sequences, can be used for the gene therapy of human diseases  
 XX SQ Sequence 26 BP; 7 A; 3 C; 9 G; 7 T; 0 U; 0 Other;  
 Query Match 5.8%; Score 26; DB 1; Length 26;  
 Best Local Similarity 100.0%; Pred. No. 59;  
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 145 CTTCCACCGTTCATCTAGAGCAAC 170  
 Db |||||  
 26 CTTCCACCGTTCATCTAGAGCAAC 1  
 RESULT 55  
 AAT10306  
 ID AAT10306 standard; DNA; 26 BP.  
 XX AC AAT10306;  
 XX DT 10-SEP-1996 (first entry)  
 XX DE RNA component of human telomerase PCR primer F3b.  
 XX RNA component; human; telomerase; polymerase chain reaction;  
 KW recombinant production; synthesis; mutant; detection; mammalian;  
 KW identification; modulating agent; neoplastic condition;  
 KW transcriptional regulatory sequence; gene therapy; disease; PCR primer;  
 KW ss.  
 XX Synthetic.  
 XX OS WO9601835-A1.  
 XX PN 25-JAN-1996.  
 XX PD 06-JUL-1995; 95WO-US008530.  
 XX 07-JUL-1994; 94US-00272102.  
 XX 27-OCT-1994; 94US-00330123.  
 XX 07-JUN-1995; 95US-00472802.  
 XX 07-JUN-1995; 95US-00482115.  
 XX (GERO-) GERON CORP.  
 XX PA  
 XX

PI Villeponteau B, Feng J, Funk W, Andrews WH;  
 XX WPI; 1996-097581/10.  
 XX  
 PT RNA component of mammalian telomerase, esp. human - useful in identifying  
 PT e.g. candidate telomerase-modulating agents.  
 XX  
 PS Example 10; Page 83; 114pp; English.  
 XX  
 CC The present sequence, a PCR primer for the RNA component of human  
 CC telomerase (RCHT), was used in a 3' RACE procedure. The RCHT can be used  
 CC in the recombinant prodn. of an active telomerase mol., capable of adding  
 CC sequences to chromosomal DNA telomeres, and in the synthesis of mutant  
 CC sequences for the detection of mutant mammalian telomerase RNA component  
 CC polynucleotides. The RCHT may also be used in the identification of  
 CC telomerase modulating agents, and in the detection of telomerase related,  
 CC or neoplastic conditions in a patient. Polynucleotides of at least 25  
 CC consecutive nucleotides identical, or complementary to the RCHT sequence  
 CC linked to heterologous transcriptional regulatory sequences, can be used  
 CC for the gene therapy of human diseases  
 XX  
 SQ Sequence 26 BP; 8 A; 6 C; 7 G; 5 T; 0 U; 0 Other;  
 Query Match 5.8%; Score 26; DB 1; Length 26;  
 Best Local Similarity 100.0%; Pred. No. 59;  
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 45 TCTAACCTTAACCTGAGAGGGCGTAG 70  
 Db 1 TCTAACCTTAACCTGAGAGGGCGTAG 26  
 RESULT 56  
 AAT58811/c  
 ID AAT58811 standard; DNA; 26 BP.  
 AC AAT58811;  
 XX  
 XX 20-NOV-1997 (first entry)  
 DE Human telomerase PCR 3'-primer R3C.  
 XX  
 KW Cancer; eukaryotic parasite; hTR; vertebrate telomerase; yeast; protozoa;  
 KW tumour; antibody; polymerase chain reaction; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9640868-A1.  
 XX  
 PD 19-DEC-1996.  
 XX  
 PF 06-JUN-1996; 96WO-US009517.  
 XX  
 PR 07-JUN-1995; 95US-00478352.  
 XX  
 PA (COLD-) COLD SPRING HARBOR LAB.  
 XX  
 PI Greider C, Autexier C;  
 XX  
 XX WPI; 1997-099928/09.  
 XX  
 PT DNA encoding essential RNA components of human telomerase - also  
 PT truncated or recombinant telomerase, useful for diagnosis and treatment  
 PT of cancer and infection by eukaryotic parasites.  
 XX  
 PS Example 5; Page 32; 48pp; English.  
 XX  
 CC The present sequence represents PCR 3'-primer R3C used for amplifying the  
 CC human telomerase (hTR). The RNA and DNA can be used in hybridisation  
 CC assays to detect or quantify telomerase activity in cells, tissue or  
 CC fluid samples, e.g. for diagnosis of eukaryotic parasites (yeast and  
 CC protozoa) or tumours. It is also useful as primers for amplification  
 CC assays. The truncated or recombinant vertebrate telomerase is used

CC therapeutically to increase telomerase activity (also as reagents in the  
 CC screening assay) while the RNA or other inhibitors such as antisense  
 CC molecules, are used to reduce such activity. Typical applications are  
 CC initiation/restoration of activity to cause senescence or to prevent  
 CC immortalisation of cells in tumours or parasites. The DNA is also used to  
 CC produce recombinant telomerase, which can then be used conventionally to  
 CC raise antibodies for diagnostic detection of telomerase. Detecting  
 CC telomerase allows early diagnosis of tumour or infection, before clinical  
 CC signs manifest. Telomerase inhibitors directed against e.g. Trypanosoma  
 CC should cause fewer side effects than drugs currently used to treat such  
 CC infections. The DNA encodes those parts of hTR RNA essential for activity  
 CC but are significantly shorter than the endogenous RNA component  
 XX  
 SQ Sequence 26 BP; 7 A; 3 C; 9 G; 7 T; 0 U; 0 Other;  
 Query Match 5.8%; Score 26; DB 1; Length 26;  
 Best Local Similarity 100.0%; Pred. No. 59;  
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 145 CTTCACCGTTCATTCCTAGAGCAAAAC 170  
 Db 26 CTTCACCGTTCATTCCTAGAGCAAAAC 1  
 RESULT 57  
 AAV41192  
 ID AAV41192 standard; DNA; 26 BP.  
 XX AAV41192;  
 AC AAV41192;  
 XX  
 XX 08-OCT-1998 (first entry)  
 DT  
 XX RNA component of human telomerase (hTR) amplifying forward primer.  
 DE  
 XX RNA component; human telomerase; antisense oligonucleotide; infection;  
 KW neuroblastoma; bladder cancer; colon cancer; prostate cancer; cancer;  
 KW contraception; sterilisation; immunosuppression; therapeutic; hTR;  
 KW immune system down-regulation; anti-inflammatory therapy; RT-PCR; primer;  
 KW ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN WO9828442-A1.  
 XX  
 PD 02-JUL-1998.  
 XX  
 PF 19-DEC-1997; 97WO-US023619.  
 XX  
 PR 20-DEC-1996; 96US-00770564.  
 PR 20-DEC-1996; 96US-00770565.  
 XX  
 XX (GERO-) GERON CORP.  
 PA  
 XX Kim NW, Wu F, Kealey JT, Pruzan R, Weinrich SL;  
 PI WPI; 1998-377670/32.  
 XX  
 XX New polynucleotide(s) anti-sense to human telomerase - used for detecting  
 PT or inhibiting human telomerase, e.g. for treating cancers, contraception,  
 PT immuno-suppression or treating infection.  
 XX  
 PS Claim 65; Page 75; 80pp; English.  
 XX  
 CC This primer is used for the RT-PCR amplification of an RNA component of  
 CC human telomerase (hTR). This is used in the method of invention of  
 CC determining the amount of hTR in a sample. The method comprises  
 CC amplifying a sequence of hTR and a control polynucleotide from a sample  
 CC and determining an amount of amplified hTR and an amount of amplified  
 CC control polynucleotide. The amount of amplified hTR is normalised with  
 CC respect to the amount of amplified control polynucleotide to provide a  
 CC normalised amount of hTR which provides a determination of the amount of  
 CC hTR in the sample. The invention provides antisense oligonucleotides to

CC the hTR which may specifically be used for detection of an RNA component  
CC of human telomerase in a sample. This is useful for diagnosing cancer  
CC (especially neuroblastoma, bladder, colon and prostate cancer), and  
CC providing prognosis for a cancer patient. The antisense oligonucleotides  
CC can be used for inhibiting telomerase activity in both cultured cells and  
CC in cells in vivo. They can be used in therapeutics for treating or  
CC preventing cancer, for contraception or sterilisation, for  
CC immunosuppression, and for selectively down-regulating specific branches  
CC of the immune system, e.g. a specific subset of T-cells, in anti-  
CC inflammatory therapies or for treating infections by, e.g. yeast,  
CC parasites or fungi  
XX  
SQ Sequence 26 BP; 3 A; 6 C; 11 G; 6 T; 0 U; 0 Other;

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 59;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 60 GAAGGGCGTAGGCCGCGTCTTTTGC 85  
|||||  
Db 1 GAAGGGCGTAGGCCGCGTCTTTTGC 26

RESULT 58  
AAV17033/C

ID AAV17033 standard; DNA; 26 BP.

XX AAV17033;

XX 13-AUG-1998 (first entry)

XX Telomerase PCR primer R3c.

DE Human; telomerase reverse transcriptase; hTERT; TRT; diagnosis; prognosis;  
XX cell proliferation; cancer; ageing; ribonucleoprotein; PCR primer; ss.

XX Synthetic.

OS Homo sapiens.

XX GB2317891-A.

XX 08-APR-1998.

XX 01-OCT-1997; 97GB-00020890.

XX 01-OCT-1996; 96US-00724643.

PR 18-APR-1997; 97US-00844419.

PR 25-APR-1997; 97US-00846017.

PR 06-MAY-1997; 97US-00851843.

PR 09-MAY-1997; 97US-00854050.

PR 14-AUG-1997; 97US-00911312.

PR 14-AUG-1997; 97US-00912951.

XX (GERO-) GERON CORP.

FA (UYTE-) UNIV TECHNOLOGY CORP.

XX Cech TR, Lingner J, Nakamura T, Chapman KB, Morin GB, Harley CB;

XX Andrews WH;

XX WPI; 1998-171633/16.

XX Pure and recombinant human Telomerase Reverse Transcriptase and its

XX variants - are useful in the diagnosis, prognosis and treatment of cell

XX proliferation conditions especially cancer and ageing.

XX Example 2; Page 218; 387pp; English.

XX The present sequence represents a PCR primer from the present invention

XX which describes human telomerase reverse transcriptase (hTERT). The

XX present invention also describes the following methods: (A) determining

XX whether a test compound is a modulator of hTERT, by detecting the change

XX in hTERT recombinant protein or polynucleotide, on administration of the

CC compound; (B) preparation of recombinant telomerase by contacting a  
CC protein preparation of hTERT with a telomerase RNA component; (C)  
CC detection of the hTERT RNA or protein in a sample by binding a relevant  
CC probe to the sample and detecting the complex formed or in the case of  
CC RNA detection, amplifying the product and correlating the presence of  
CC complex or amplification product with presence of hTERT in the sample; and  
CC (D) increasing the proliferation of a vertebrate cell by increasing hTERT  
CC expression; and (E) the use of an agent that causes an increase in cell  
CC vertebrate cell proliferation to create a medicament that inhibits  
CC ageing. A protein preparation of hTERT and the polynucleotide encoding  
CC hTERT can be used in the manufacture of medicaments for inhibiting the  
CC effect of ageing or cancer. Inhibitors of telomerase activity can be used  
CC to treat conditions that are associated with high telomerase activity. A  
CC protein preparation of hTERT can also be used in the new methods

XX SQ Sequence 26 BP; 7 A; 3 C; 9 G; 7 T; 0 U; 0 Other;

Query Match 5.8%; Score 26; DB 1; Length 26;

Best Local Similarity 100.0%; Pred. No. 59;

Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATTTCTAGAGCAAAC 170

|||||  
Db 26 CTTCCACCGTTCATTTCTAGAGCAAAC 1

RESULT 59

AAV17032

ID AAV17032 standard; DNA; 26 BP.

XX AAV17032;

XX 13-AUG-1998 (first entry)

XX Telomerase PCR primer F3b.

XX Human; telomerase reverse transcriptase; hTERT; TRT; diagnosis; prognosis;

XX cell proliferation; cancer; ageing; ribonucleoprotein; PCR primer; ss.

XX Synthetic.

OS Homo sapiens.

XX GB2317891-A.

XX 08-APR-1998.

XX 01-OCT-1997; 97GB-00020890.

XX 01-OCT-1996; 96US-00724643.

PR 18-APR-1997; 97US-00844419.

PR 25-APR-1997; 97US-00846017.

PR 06-MAY-1997; 97US-00851843.

PR 09-MAY-1997; 97US-00854050.

PR 14-AUG-1997; 97US-00911312.

PR 14-AUG-1997; 97US-00912951.

XX (GERO-) GERON CORP.

FA (UYTE-) UNIV TECHNOLOGY CORP.

XX Cech TR, Lingner J, Nakamura T, Chapman KB, Morin GB, Harley CB;

XX Andrews WH;

XX WPI; 1998-171633/16.

XX Pure and recombinant human Telomerase Reverse Transcriptase and its

XX variants - are useful in the diagnosis, prognosis and treatment of cell

XX proliferation conditions especially cancer and ageing.

XX Example 2; Page 218; 387pp; English.

XX The present sequence represents a PCR primer from the present invention

XX which describes human telomerase reverse transcriptase (hTERT). The

CC present invention also describes the following methods: (A) determining  
CC whether a test compound is a modulator of hTERT, by detecting the change  
CC in hTERT recombinant protein or polynucleotide, on administration of the  
CC compound; (B) preparation of recombinant telomerase by contacting a  
CC protein preparation of hTERT with a telomerase RNA component; (C)  
CC detection of the hTERT RNA or protein in a sample by binding a relevant  
CC probe to the sample and detecting the complex formed or in the case of  
CC RNA detection, amplifying the product and correlating the presence of  
CC complex or amplification product with presence of hTERT in the sample; and  
CC (D) increasing the proliferation of a vertebrate cell by increasing hTERT  
CC expression; and (E) the use of an agent that causes an increase in cell  
CC vertebrate cell proliferation to create a medicament that inhibits  
CC ageing. A protein preparation of hTERT and the polynucleotide encoding  
CC hTERT can be used in the manufacture of medicaments for inhibiting the  
CC effect of ageing or cancer. Inhibitors of telomerase activity can be used  
CC to treat conditions that are associated with high telomerase activity. A  
CC protein preparation of hTERT can also be used in the new methods  
XX  
XX  
SQ Sequence 26 BP; 8 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 59;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 45 TCTAACCCCTAACTGAGAAGGCGGTAG 70  
|||||  
Db 1 TCTAACCCCTAACTGAGAAGGCGGTAG 26

RESULT 60  
AAV19488  
ID AAV19488 standard; DNA; 26 BP.  
XX  
AC AAV19488;  
XX  
XX 28-AUG-1998 (first entry)  
XX  
XX Human hTR gene RT-PCR primer F3b.  
XX  
KW hTR gene; TPC2; TPC3; telomere length; telomerase; human; cancer;  
KW gene therapy; diagnosis; PCR; primer; ss.  
XX Synthetic.  
OS Homo sapiens.  
XX WO9811204-A1.  
XX  
XX 19-MAR-1998.  
XX  
XX 13-SEP-1996; 96WO-US014679.  
XX  
XX 13-SEP-1996; 96WO-US014679.  
XX  
XX (GERO-) GERON CORP.  
XX  
XX Villeponteau B, Feng J, Andrews WH, Adams RR;  
XX WPI; 1998-207373/18.  
XX  
XX Human TPC2, TPC3 and TR genes - regulate telomere length or modulate  
XX telomerase activity.  
XX Synthetic.  
OS Homo sapiens.  
XX WO9811204-A1.  
XX  
XX 19-MAR-1998.  
XX  
XX 13-SEP-1996; 96WO-US014679.  
XX  
XX 13-SEP-1996; 96WO-US014679.  
XX  
XX (GERO-) GERON CORP.  
XX  
XX Villeponteau B, Feng J, Andrews WH, Adams RR;  
XX WPI; 1998-207373/18.  
XX  
XX Human TPC2, TPC3 and TR genes - regulate telomere length or modulate  
XX telomerase activity.  
XX Disclosure; Page 49; 86pp; English.  
XX  
XX Primers F3b and R3c (see AAV19489) were designed for the PCR  
XX amplification of the human telomerase hTR gene (see AAV19481). hTR mRNA  
XX levels were showed to correlate with telomerase activity levels in a  
XX variety of mortal and immortal cell lines. Methods of the invention allow  
XX detection and quantitation of TPC2 (see AAV19479), TPC3 (see AAV19480)  
XX and/or TPC2 gene products and can be used to detect immortal cells,  
XX especially telomerase positive cancer cells  
XX  
XX Sequence 26 BP; 8 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 59;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 45 TCTAACCCCTAACTGAGAAGGCGGTAG 70  
|||||  
Db 1 TCTAACCCCTAACTGAGAAGGCGGTAG 26

RESULT 61  
AAV19489/c  
ID AAV19489 standard; DNA; 26 BP.  
XX  
AC AAV19489;  
XX  
XX 28-AUG-1998 (first entry)  
XX  
XX Human hTR gene RT-PCR primer R3c.  
XX  
KW hTR gene; TPC2; TPC3; telomere length; telomerase; human; cancer;  
KW gene therapy; diagnosis; PCR; primer; ss.  
XX Synthetic.  
OS Homo sapiens.  
XX WO9811204-A1.  
XX  
XX 19-MAR-1998.  
XX  
XX 13-SEP-1996; 96WO-US014679.  
XX  
XX 13-SEP-1996; 96WO-US014679.  
XX  
XX (GERO-) GERON CORP.  
XX  
XX Villeponteau B, Feng J, Andrews WH, Adams RR;  
XX WPI; 1998-207373/18.  
XX  
XX Human TPC2, TPC3 and TR genes - regulate telomere length or modulate  
XX telomerase activity.  
XX Disclosure; Page 49; 86pp; English.  
XX  
XX Primers R3c and F3b (see AAV19488) were designed for the PCR  
XX amplification of the human telomerase hTR gene (see AAV19481). hTR mRNA  
XX levels were showed to correlate with telomerase activity levels in a  
XX variety of mortal and immortal cell lines. Methods of the invention allow  
XX detection and quantitation of TPC2 (see AAV19479), TPC3 (see AAV19480)  
XX and/or TPC2 gene products and can be used to detect immortal cells,  
XX especially telomerase positive cancer cells  
XX  
XX Sequence 26 BP; 7 A; 3 C; 9 G; 7 T; 0 U; 0 Other;

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 59;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCACCCGTTTCATTCTAGAGCAAC 170  
|||||  
Db 26 CTTCACCCGTTTCATTCTAGAGCAAC 1

RESULT 62  
AAAX90788/c  
ID AAX90788 standard; DNA; 26 BP.  
XX  
AC AAX90788;  
XX  
XX 13-JAN-2000 (first entry)  
XX  
XX Human telomerase RNA specific PCR primer-2.



XX PCR primer; human telomerase RNA; hTR; amplify; human stauferen cDNA;  
 KW hStau; synthesised; random hexamer primer;  
 KW Superscript II reverse transcriptase; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX WO9951255-A1.  
 XX 14-OCT-1999.  
 XX  
 XX 06-APR-1999; 99WO-US007533.  
 XX  
 XX 06-APR-1998; 98US-0080783P.  
 XX  
 XX (UWJO ) UNIV JOHNS HOPKINS SCHOOL MEDICINE.  
 XX Greider CW, Le S;  
 XX WPI; 1999-620168/53.  
 XX  
 XX Human stauferen polypeptide useful in methods for identifying telomerase  
 PT inhibitors.  
 XX  
 PS Disclosure; Page 15; 50pp; English.  
 XX  
 XX The present sequence is a PCR primer specific to human telomerase RNA  
 CC (hTR). It is used to amplify human stauferen (hStau) cDNA synthesised using  
 CC random hexamer primers and Superscript II reverse transcriptase  
 CC  
 XX Sequence 26 BP; 7 A; 3 C; 9 G; 7 T; 0 U; 0 Other;  
 SQ  
 Query Match 5.8%; Score 26; DB 1; Length 26;  
 Best Local Similarity 100.0%; Pred. No. 59;  
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 145 CTTCCACCGTTCATCTAGAGCAAC 170  
 Db 26 CTTCCACCGTTCATCTAGAGCAAC 1  
 |||||  
 RESULT 63  
 AAZ08703  
 ID AAZ08703 standard; DNA; 26 BP.  
 AC AAZ08703;  
 XX  
 DT 20-OCT-1999 (first entry)  
 XX  
 DE Human telomerase RNA template PCR primer F3B.  
 XX  
 KW Telomerase; body fluid; cancer; tumour; screening; TRAP; diagnosis;  
 KW telomeric repeat amplification protocol; detection; PCR primer; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX WO9941406-A1.  
 XX  
 PD 19-AUG-1999.  
 XX  
 XX 16-FEB-1999; 99WO-US003302.  
 XX  
 XX 16-FEB-1998; 98US-0074793P.  
 XX  
 XX (UYMA-) UNIV MARYLAND BALTIMORE.  
 PA  
 XX Strovel JW, Stamberg J, Highsmith E, Abruzzo LV;  
 XX WPI; 1999-508655/42.  
 XX  
 XX Detecting telomerase activity in non-cellular body fluid using a modified

PT telomeric repeat amplification protocol.  
 XX  
 PS Disclosure; Page 16; 32pp; English.  
 XX  
 CC A method has been developed for detecting telomerase activity in a non-  
 CC cellular portion of body fluid from a cancer patient using a modified  
 CC telomeric repeat amplification protocol (TRAP). A method for detecting  
 CC cancer comprises: (a) removing the cellular portion of a body fluid  
 CC specimen from the patient; (b) preparing a protein extract from the body  
 CC fluid remainder; (c) assaying the extract for the presence and quantity  
 CC of telomerase RNA or telomerase activity; and (d) comparing the results  
 CC with normal levels to determine the presence of cancer. The methods are  
 CC used in cancer diagnosis and prognosis, and also to monitor cancer  
 CC therapy effectiveness. Unlike prior art telomerase activity assays in  
 CC cancer patients, the method allows noninvasive sample collection. The  
 CC methods are also more reliable and less tumour specific than other  
 CC methods which detect circulating tumour markers. The present sequence  
 CC represents a human telomerase RNA template PCR primer used in the  
 CC exemplification of the present invention  
 XX  
 SQ Sequence 26 BP; 8 A; 6 C; 7 G; 5 T; 0 U; 0 Other;  
 Query Match 5.8%; Score 26; DB 1; Length 26;  
 Best Local Similarity 100.0%; Pred. No. 59;  
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 45 TCTAACCCCTAACTGAGAGGGCGTAG 70  
 Db 1 TCTAACCCCTAACTGAGAGGGCGTAG 26  
 |||||  
 RESULT 64  
 AAAX77401  
 ID AAAX77401 standard; DNA; 26 BP.  
 XX  
 AC AAAX77401;  
 XX  
 DT 05-AUG-1999 (first entry)  
 XX  
 DE Human telomerase RNA PCR primer TE-hTR5.3.  
 XX  
 KW Telomerase; human; diagnosis; bladder cancer; detection; urine;  
 KW PCR primer; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN EP926245-A2.  
 XX  
 PD 30-JUN-1999.  
 XX  
 XX 21-DEC-1998; 98EP-00124326.  
 PF  
 PR 22-DEC-1997; 97DE-01057300.  
 XX  
 XX (HOFF ) ROCHE DIAGNOSTICS GMBH.  
 PA  
 XX Emrich T;  
 XX  
 XX WPI; 1999-349242/30.  
 DR  
 XX  
 PT Detecting telomerase RNA in urine - useful for diagnosis of bladder  
 PT cancer.  
 XX  
 PS Claim 6; Page 10; 13pp; German.  
 XX  
 CC This invention describes a novel method for diagnosing bladder cancer,  
 CC which comprises detecting telomerase RNA in a urine sample. The method of  
 CC the invention has greater sensitivity and reliability than assays for  
 CC telomerase activity (cf. WO 9735871). This sequence represents a primer  
 CC used in the method of the invention  
 XX  
 SQ Sequence 26 BP; 6 A; 6 C; 11 G; 3 T; 0 U; 0 Other;

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 59;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 54 AACTGAGAGGGCGTAGCGCGGTGC 79  
| | | | | | | | | | | | | | | | | | | | | | | | | |  
Db 1 AACTGAGAGGGCGTAGCGCGGTGC 26

RESULT 65  
AAAX77402/c  
ID AAX77402 standard; DNA; 26 BP.  
XX AC AAX77402;  
XX AC AAX77402;  
DT 05-AUG-1999 (first entry)  
XX Human telomerase RNA PCR primer TE-hTR3.1.  
XX Telomerase; human; diagnosis; bladder cancer; detection; urine;  
KW PCR primer; ss.  
XX Synthetic.  
OS Homo sapiens.  
XX EP926245-A2.  
XX 30-JUN-1999.  
XX 21-DEC-1998; 98EP-00124326.  
XX 22-DEC-1997; 97DE-01057300.  
XX (HOFF) ROCHE DIAGNOSTICS GMBH.  
XX Emrich T;  
XX WPI; 1999-349242/30.  
XX Detecting telomerase RNA in urine - useful for diagnosis of bladder cancer.  
XX Claim 6; Page 10; 13pp; German.  
XX This invention describes a novel method for diagnosing bladder cancer which comprises detecting telomerase RNA in a urine sample. The method of the invention has greater sensitivity and reliability than assays for telomerase activity (cf. WO 9735871). This sequence represents a primer used in the method of the invention  
XX Sequence 26 BP; 7 A; 3 C; 9 G; 7 T; 0 U; 0 Other;  
Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 59;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTCACTTAGACAAAC 170  
| | | | | | | | | | | | | | | | | | | | | | | | | |  
Db 26 CTTCCACCGTTCACTTAGACAAAC 1

RESULT 66  
AAAX77131  
ID AAX77131 standard; DNA; 26 BP.  
XX AC AAX77131;  
XX 03-AUG-1999 (first entry)  
DT PCR primer hTR S28.  
DE Cellular senescence; modulator; GC6 gene; senescent gene expression;  
KW

KW pGC6; human; PCR primer; ss.  
XX Synthetic.  
XX WO9925878-A2.  
XX 27-MAY-1999.  
XX PF 19-NOV-1998; 98WO-US024996.  
XX PR 19-NOV-1997; 97US-00974180.  
XX (GERO-) GERON CORP.  
XX Funk W;  
XX WPI; 1999-347496/29.  
XX New human GC6 gene, useful for identifying agents for treating diseases and/or conditions associated with cell senescence.  
XX Example 5; Page 74; 79pp; English.  
XX The invention relates to methods for modulating and identifying cellular senescence. Recombinant expression vectors comprising a recombinant polynucleotide corresponding to a polynucleotide in a human GC6 gene, are useful for altering senescent gene expression. The vectors and host cells comprising the vectors are useful for identifying agents that prevent or modulate senescent gene expression. The polynucleotides are useful for producing the protein, pGC6 and nucleic acid derivatives. The proteins encoded are useful for raising antibodies specific for pGC6, which are useful for isolating pGC6, and for detecting cells comprising pGC6 in complex cell mixtures. The characterization of the polynucleotides enable the identification of therapeutic agents that identify and distinguish between young and senescent cells. This enables treatment of aging diseases induced or exacerbated by cellular senescence  
XX Sequence 26 BP; 1 A; 8 C; 9 G; 8 T; 0 U; 0 Other;  
Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 59;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 306 TTGGGCTCTGTACGCGCGGTCTCT 331  
| | | | | | | | | | | | | | | | | | | | | | | | | |  
Db 1 TTGGGCTCTGTACGCGCGGTCTCT 26

RESULT 67  
AAAX01541  
ID AAX01541 standard; DNA; 26 BP.  
XX AC AAX01541;  
XX 29-APR-1999 (first entry)  
XX PCR primer for Human TPC3 gene.  
XX TPC2; TPC3; human; telomere length regulation; cancer; pregnancy; fertility; diagnosis; therapy; PCR primer; ss.  
XX Synthetic.  
OS Homo sapiens.  
XX US5858777-A.  
XX 12-JAN-1999.  
XX 13-SEP-1996; 96US-00710249.  
XX 08-SEP-1995; 95US-0003492P.  
XX 05-JAN-1996; 96US-00583808.  
XX

PA (GERO-) GERON CORP.  
XX Adams RR, Andrews WH, Villeponteau B, Feng J;  
XX WPI; 1999-152104/13.  
XX DNA encoding proteins TPC2 and TPC3 - useful for regulating telomere  
PT length or modulating telomerase activity.  
XX Example; Col 38; 59pp; English.  
XX This sequence represents a PCR primer for DNA encoding the human TPC3  
CC protein, which is contained within the recombinant mammalian host cell of  
CC the invention. The invention provides methods and reagents for regulating  
CC telomere length and modulating telomerase activity in mammalian cells as  
CC well as for detecting, diagnosing, and treating related diseases and  
CC conditions such as cancer, pregnancy, or fertility in humans and other  
CC mammals  
XX Sequence 26 BP; 8 A; 6 C; 7 G; 5 T; 0 U; 0 Other;  
SQ  
Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 59;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 45 TCTAACCTTAAGGAGGCGTAG 70  
Db 1 TCTAACCTTAAGGAGGCGTAG 26  
RESULT 68  
AAX01542/c  
ID AAX01542 standard; DNA; 26 BP.  
XX AC AAX01542;  
XX 29-APR-1999 (first entry)  
XX PCR primer for Human TPC3 gene.  
XX TPC2; TPC3; human; telomere length regulation; cancer; pregnancy;  
XX fertility; diagnosis; therapy; PCR primer; ss.  
XX Synthetic.  
XX Homo sapiens.  
XX US5858777-A.  
XX 12-JAN-1999.  
XX 13-SEP-1996; 96US-00710249.  
XX 08-SEP-1995; 95US-0003492P.  
XX 05-JAN-1996; 96US-00583608.  
XX (GERO-) GERON CORP.  
XX Adams RR, Andrews WH, Villeponteau B, Feng J;  
XX WPI; 1999-152104/13.  
XX DNA encoding proteins TPC2 and TPC3 - useful for regulating telomere  
PT length or modulating telomerase activity.  
XX Example; Col 38; 59pp; English.  
XX This sequence represents a PCR primer for DNA encoding the human TPC3  
CC protein, which is contained within the recombinant mammalian host cell of  
CC the invention. The invention provides methods and reagents for regulating  
CC telomere length and modulating telomerase activity in mammalian cells as  
CC well as for detecting, diagnosing, and treating related diseases and  
CC conditions such as cancer, pregnancy, or fertility in humans and other  
CC mammals

XX SQ Sequence 26 BP; 7 A; 3 C; 9 G; 7 T; 0 U; 0 Other;  
Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 59;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 145 CTTCACCGTTTCATTCTAGAGCAAC 170  
Db 26 CTTCACCGTTTCATTCTAGAGCAAC 1  
RESULT 69  
AAA88250/c  
ID AAA88250 standard; DNA; 26 BP.  
XX AC AAA88250;  
XX 15-DEC-2000 (first entry)  
XX Human telomerase RNA reverse transcriptase PCR primer #2.  
XX Human; telomerase; hTR; reverse transcriptase; RT-PCR; PCR primer;  
XX detection; cancer; micrometastasis; diagnosis; ss.  
XX Homo sapiens.  
XX OS  
XX WO200046601-A1.  
XX 10-AUG-2000.  
XX 01-FEB-2000; 2000WO-1B000100.  
XX 02-FEB-1999; 99GB-00002302.  
XX (LARS/) LARSEN F.  
XX (SKAA/) SKAANSENG M.  
XX Larsen F, Skaanseng M;  
XX WPI; 2000-491281/43.  
XX Detecting telomerase activity in samples, useful for diagnosis of cancer  
XX and micrometastasis, comprises treating sample with solid phase, removing  
XX solid phase and treating to elute bound telomerase.  
XX Example 11; Page 38; 68pp; English.  
XX The present invention describes a method (I) for detecting telomerase  
XX activity in a sample. The method comprises treating the sample with a  
XX solid phase to bind telomerase, separating the solid phase from the  
XX sample to form a test sample which may be treated to elute bound  
XX telomerase and assaying the sample for telomerase activity. Also  
XX described are: (1) a kit (II) for detecting telomerase activity,  
XX comprising a solid phase and one or more components for assaying  
XX telomerase activity; and (2) a component (III) of an assay system for  
XX detecting telomerase activity, comprising a solid phase for binding  
XX telomerase on which is present a substrate for telomerase elongation. (I)  
XX is useful for cancer diagnosis or prognosis and detection of  
XX micrometastasis as detection of telomerase activity is indicative of  
XX cancer or micrometastasis. The solid phase used in (I) is useful for  
XX separating telomerase from a sample and therefore for detecting  
XX telomerase activity. (II) is useful for detection of cancer cells and may  
XX also comprises means for assaying an mRNA diagnostic for cancer. The  
XX present sequence represents a reverse transcriptase (RT) PCR primer for  
XX human telomerase RNA, which is used in an example from the present  
XX invention  
XX SQ Sequence 26 BP; 7 A; 3 C; 9 G; 7 T; 0 U; 0 Other;  
Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 59;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      145 CTTCCACCGTTTCATTCTAGAGCAAC 170
Db      26 CTTCCACCGTTTCATTCTAGAGCAAC 1
|||||
|||||

RESULT 70
AAA88249
ID      AAA88249 standard; DNA; 26 BP.
XX
XX      AAA88249;
AC
DT      15-DEC-2000 (first entry)
XX
XX      Human telomerase RNA reverse transcriptase PCR primer #1.
DE
XX      Human; telomerase; hTR; reverse transcriptase; RT-PCR; PCR primer;
KW      detection; cancer; micrometastasis; diagnosis; ss.
XX
XX      Homo sapiens.
OS
XX
XX      WO200046601-A1.
PN
XX
XX      10-AUG-2000.
PD
XX
XX      01-FEB-2000; 2000WO-IB000100.
PF
XX
XX      02-FEB-1999; 99GB-00002302.
PR
XX
XX      (LARS/) LARSEN F.
PA
XX      (SKAA/) SKAANSENG M.
PA
XX
XX      Larsen F, Skaanseng M;
PI
XX
XX      WPI; 2000-491281/43.
DR
XX
XX      Detecting telomerase activity in samples, useful for diagnosis of cancer
PT      and micrometastasis, comprises treating sample with solid phase, removing
PT      solid phase and treating to elute bound telomerase.
XX
XX
XX      Example 11; Page 38; 68pp; English.
XX
XX      The present invention describes a method (I) for detecting telomerase
CC      activity in a sample. The method comprises treating the sample with a
CC      solid phase to bind telomerase, separating the solid phase from the
CC      sample to form a test sample which may be treated to elute bound
CC      telomerase and assaying the sample for telomerase activity. Also
CC      described are: (1) a kit (II) for detecting telomerase activity,
CC      comprising a solid phase and one or more components for assaying
CC      telomerase activity; and (2) a component (III) of an assay system for
CC      detecting telomerase activity, comprising a solid phase for binding
CC      telomerase on which is present a substrate for telomerase elongation. (I)
CC      is useful for cancer diagnosis or prognosis and detection of
CC      micrometastasis as detection of telomerase activity is indicative of
CC      cancer or micrometastasis. The solid phase used in (I) is useful for
CC      separating telomerase from a sample and therefore for detecting
CC      telomerase activity. (II) is useful for detection of cancer cells and may
CC      also comprise means for assaying an mRNA diagnostic for cancer. The
CC      present sequence represents a reverse transcriptase (RT) PCR primer for
CC      human telomerase RNA, which is used in an example from the present
CC      invention
XX
XX      Sequence 26 BP; 8 A; 6 C; 7 G; 5 T; 0 U; 0 Other;
SQ
Query Match      5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 59;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy      45 TCTACCCCTTAAGGAGGCGGTAG 70
Db      1 TCTACCCCTTAAGGAGGCGGTAG 26
|||||
|||||
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RESULT 71
ABK48024/c
ID      ABK48024 standard; DNA; 26 BP.
XX
XX      ABK48024;
AC
XX
XX      18-JUN-2002 (first entry)
DT
XX
XX      Human telomerase-associated RNA template (hTR), PCR primer hTR2.
DE
XX
XX      Human; telomerase-associated RNA template; hTR; endometrial; malignancy;
KW      cancer; breast; ovarian; head and neck; lung; cervical; colorectal;
KW      gastric; liver; pancreatic; bladder; prostate; brain; kidney; oesophagus;
KW      melanoma; sarcoma; premalignancy; carcinoma in-situ; cervical dysplasia;
KW      bronchial dysplasia; cervical intraepithelial neoplasia;
KW      atypical hyperplasia; colorectal adenoma;
KW      atypical hyperplasia; hyperplasia; tumour; Barrett's oesophagus;
KW      atypical endometrial hyperplasia; primer; ss.
XX
XX      Homo sapiens.
OS
XX
XX      WO200218652-A2.
PN
XX
XX      07-MAR-2002.
PD
XX
XX      28-AUG-2001; 2001WO-US026749.
PF
XX
XX      31-AUG-2000; 2000US-00653573.
PR
XX
XX      (ONCO-) ONCOMEDX INC.
PA
XX
XX      Kopreski MS, Gocke CD;
PI
XX
XX      WPI; 2002-269532/31.
DR
XX
XX      Detecting human telomerase RNA template RNA or human telomerase reverse
PT      transcriptase protein RNA in bodily fluid, useful as marker for
PT      diagnosing, monitoring or treating cancer, carcinoma in situ or
PT      premalignancy.
XX
XX      Example 1; Page 14; 30pp; English.
XX
XX      The invention relates to detecting human telomerase RNA template (hTR)
CC      RNA or human telomerase reverse transcriptase protein RNA (hTRT) RNA (I)
CC      in a bodily fluid, comprising amplifying RNA extracted from plasma or
CC      serum sample, or its corresponding cDNA comprising (I), using primers or
CC      probes that target (I) or cDNA and detecting qualitatively or
CC      quantitatively amplified product of (I) or cDNA product. The method is
CC      useful for detecting (I) in a bodily fluid, which is useful for
CC      identifying a human having (I) expressing cells or tissue which include a
CC      malignancy preferably a cancer of breast, ovarian, head and neck, lung,
CC      cervical, colorectal, gastric, liver, pancreatic, bladder, prostate,
CC      endometrial, brain, kidney, or oesophagus, or a melanoma or sarcoma,
CC      premalignancy or carcinoma in-situ, preferably cervical dysplasia,
CC      cervical intraepithelial neoplasia, bronchial dysplasia, atypical
CC      hyperplasia of the breast, ductal carcinoma in-situ, colorectal adenoma,
CC      atypical endometrial hyperplasia, or Barrett's oesophagus, where the
CC      human is at risk for developing a malignancy or premalignancy or is known
CC      to have malignancy, premalignancy or carcinoma in situ. The method is
CC      also useful for treating a human with cancer for telomerase-directed
CC      therapy, which comprises selecting the human for the therapy after
CC      detection of (I), for determining a need for diagnostic test in a human
CC      with malignancy or premalignancy and for monitoring a therapy
CC      administered to a human. (I) provides a marker which is utilised as a
CC      guide to whether adequate therapeutic effect has been achieved, or
CC      whether additional or more advanced therapy is required, and to assess
CC      prognosis in these patients. The method also allows identification or
CC      analysis, either quantitatively or qualitatively, of (I) in plasma or
CC      serum of humans during or following surgical procedures to remove
CC      premalignant or malignant lesions, and thus allow stratification of such
CC      patients as to their risk of residual cancer following surgery, and their
CC      need for further therapy or who has completed therapy as an early
CC      indicator or relapsed cancer, impending relapse, or treatment failure.
CC
```

CC The method allows the development and application of telomerase-specific  
 CC therapy even when only premalignant tumours, early cancer, or occult  
 CC cancer or metastasis such as following resection or in minimal residual  
 CC disease are present. The present sequence represents a PCR primer for  
 CC human telomerase-associated RNA template (hTR)  
 XX  
 SQ Sequence 26 BP; 7 A; 3 C; 9 G; 7 T; 0 U; 0 Other;  
 Query Match 5.8%; Score 26; DB 1; Length 26;  
 Best Local Similarity 100.0%; Pred. No. 59;  
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 145 CTTCCACCGTTCATCTAGAGCAAC 170  
 Db 26 CTTCCACCGTTCATCTAGAGCAAC 1  
 RESULT 72  
 ABK48023  
 ID ABK48023 standard; DNA; 26 BP.  
 XX AC ABK48023;  
 XX  
 DT 18-JUN-2002 (first entry)  
 XX  
 DE Human telomerase-associated RNA template (hTR), PCR primer hTR1.  
 XX  
 KW Human; telomerase-associated RNA template; hTR; endometrial; malignancy;  
 KW cancer; breast; ovarian; head and neck; lung; cervical; colorectal;  
 KW gastric; liver; pancreatic; bladder; prostate; brain; kidney; oesophagus;  
 KW melanoma; sarcoma; premalignancy; carcinoma in-situ; cervical dysplasia;  
 KW bronchial dysplasia; cervical intraepithelial neoplasia;  
 KW atypical hyperplasia; colorectal adenoma;  
 KW atypical endometrial hyperplasia; tumour; Barrett's oesophagus;  
 KW telomerase-directed therapy; primer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO200218652-A2.  
 XX  
 PD 07-MAR-2002.  
 XX  
 XX 28-AUG-2001; 2001WO-US026749.  
 XX  
 XX 31-AUG-2000; 2000US-00653573.  
 XX  
 XX (ONCO-) ONCOMEDX INC.  
 XX  
 XX Kopreski MS, Gocke CD;  
 XX  
 XX WPI; 2002-269532/31.  
 XX  
 XX Detecting human telomerase RNA template RNA or human telomerase reverse  
 XX transcriptase protein RNA in bodily fluid, useful as marker for  
 XX diagnosing, monitoring or treating cancer, carcinoma in situ or  
 XX premalignancy.  
 XX  
 XX Example 1; Page 14; 30pp; English.  
 XX  
 XX The invention relates to detecting human telomerase RNA template (hTR)  
 XX RNA or human telomerase reverse transcriptase protein RNA (hTRT) RNA (I)  
 XX in a bodily fluid, comprising amplifying RNA extracted from plasma or  
 XX serum sample, or its corresponding cDNA comprising (I), using primers or  
 XX probes that target (I) or cDNA and detecting qualitatively or  
 XX quantitatively amplified product of (I) or cDNA product. The method is  
 XX useful for detecting (I) in a bodily fluid, which is useful for  
 XX identifying a human having (I) expressing cells or tissue which include a  
 XX malignancy preferably a cancer of breast, ovarian, head and neck, lung,  
 XX cervical, colorectal, gastric, liver, pancreatic, bladder, prostate,  
 XX endometrial, brain, kidney, or oesophagus, or a melanoma or sarcoma,  
 XX premalignancy or carcinoma in-situ, preferably cervical dysplasia,  
 XX cervical intraepithelial neoplasia, bronchial dysplasia, atypical  
 XX hyperplasia of the breast, ductal carcinoma in-situ, colorectal adenoma,

CC atypical endometrial hyperplasia, or Barrett's oesophagus, where the  
 CC human is at risk for developing a malignancy or premalignancy or is known  
 CC to have malignancy, premalignancy or carcinoma in situ. The method is  
 CC also useful for treating a human with cancer for telomerase-directed  
 CC therapy, which comprises selecting the human for the therapy after  
 CC detection of (I), for determining a need for diagnostic test in a human  
 CC with malignancy or premalignancy and for monitoring a therapy  
 CC administered to a human. (I) provides a marker which is utilised as a  
 CC guide to whether adequate therapeutic effect has been achieved, or  
 CC whether additional or more advanced therapy is required, and to assess  
 CC prognosis in these patients. The method also allows identification or  
 CC analysis, either quantitatively or qualitatively, of (I) in plasma or  
 CC serum of humans during or following surgical procedures to remove  
 CC premalignant or malignant lesions, and thus allow stratification of such  
 CC patients as to their risk of residual cancer following surgery, and their  
 CC need for further therapy or who has completed therapy as an early  
 CC indicator or relapsed cancer, impending relapse, or treatment failure.  
 CC The method allows the development and application of telomerase-specific  
 CC therapy even when only premalignant tumours, early cancer, or occult  
 CC cancer or metastasis such as following resection or in minimal residual  
 CC disease are present. The present sequence represents a PCR primer for  
 CC human telomerase-associated RNA template (hTR)  
 XX  
 SQ Sequence 26 BP; 8 A; 6 C; 7 G; 5 T; 0 U; 0 Other;  
 Query Match 5.8%; Score 26; DB 1; Length 26;  
 Best Local Similarity 100.0%; Pred. No. 59;  
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 45 TCTAACCTTAACCTAGAGGCGTAG 70  
 Db 1 TCTAACCTTAACCTAGAGGCGTAG 26  
 RESULT 73  
 AAD24246/c  
 ID AAD24246 standard; DNA; 26 BP.  
 XX  
 XX AAD24246;  
 XX  
 DT 07-MAR-2002 (first entry)  
 XX  
 DE Human telomerase (hTR) cDNA amplifying R3c downstream RT-PCR primer.  
 XX  
 KW Human; telomerase; TR; telomerase activity-related disease; therapy;  
 KW cancer; pregnancy; fertility; RT-PCR primer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX US6300110-B1.  
 XX  
 PD 09-OCT-2001.  
 XX  
 XX 23-DEC-1998; 98US-00220157.  
 XX  
 XX 09-SEP-1995; 95US-0003492P.  
 XX 05-JAN-1996; 96US-00583808.  
 XX 13-SEP-1996; 96US-00710249.  
 XX  
 XX (GERO-) GERON CORP.  
 XX  
 XX Villeponteau B, Feng J, Andrews WH, Adams RR;  
 XX  
 XX WPI; 2002-033174/04.  
 XX  
 XX Peptide products of the human TPC2 and TPC3 gene are involved in  
 XX regulation of telomere length and activity are useful to diagnose and  
 XX treat telomere length and activity-related diseases.  
 XX  
 XX Example; Col 38; 60pp; English.  
 XX  
 XX The invention relates to methods and reagents for regulating telomere  
 CC length and for modulating telomerase activity in mammalian cells. The

CC invention also relates to purified, synthetic or recombinant peptides  
CC such as TPC2 or TPC3 used for detecting regulators of telomere length and  
CC telomerase activity in mammalian cells and for a variety of related  
CC diagnostic and therapeutic purposes. The method is useful for screening,  
CC diagnosing, monitoring and treating diseases and other conditions such as  
CC cancer, pregnancy, fertility, telomere length and telomerase-activity.  
CC The present sequence is a reverse transcription (RT) PCR primer used for  
CC amplifying human telomerase (hTR) cDNA  
XX  
SQ Sequence 26 BP; 7 A; 3 C; 9 G; 7 T; 0 U; 0 Other;

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 59;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTCATTCTAGAGCAAC 170  
Db 26 CTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 74  
AAD24245  
ID AAD24245 standard; DNA; 26 BP.  
XX AC  
AC AAD24245;  
XX DT  
DT 07-MAR-2002 (first entry)  
XX DE

Human telomerase (hTR) cDNA amplifying F3b upstream RT-PCR primer.

Human; telomerase; TR; telomerase activity-related disease; therapy;  
cancer; pregnancy; fertility; RT-PCR primer; ss.  
Homo sapiens.

US6300110-B1.

09-OCT-2001.

23-DEC-1998; 98US-00220157.

09-SEP-1995; 95US-0003492P.

05-JAN-1996; 96US-00583808.

13-SEP-1996; 96US-00710249.

(GERO-) GERON CORP.

Villeponteau B, Feng J, Andrews WH, Adams RR;

WPI; 2002-033174/04.

Peptide products of the human TPC2 and TPC3 gene are involved in  
regulation of telomere length and activity are useful to diagnose and  
treat telomere length and activity-related diseases.

Example; Col 38; 60pp; English.

The invention relates to methods and reagents for regulating telomere  
length and for modulating telomerase activity in mammalian cells. The  
invention also relates to purified, synthetic or recombinant peptides  
such as TPC2 or TPC3 used for detecting regulators of telomere length and  
telomerase activity in mammalian cells and for a variety of related  
diagnostic and therapeutic purposes. The method is useful for screening,  
diagnosing, monitoring and treating diseases and other conditions such as  
cancer, pregnancy, fertility, telomere length and telomerase-activity.  
The present sequence is a reverse transcription (RT) PCR primer used for  
amplifying human telomerase (hTR) cDNA

Sequence 26 BP; 8 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 59;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 45 TCTAACCCCTAACTGAGAGGGCGTAG 70  
Db 1 TCTAACCCCTAACTGAGAGGGCGTAG 26

RESULT 75  
ABA95496  
ID ABA95496 standard; DNA; 26 BP.  
XX AC  
AC ABA95496;

DT 12-MAR-2002 (first entry)

Human telomerase RNA, hTR, sense PCR primer.

Human; telomerase RNA; PCR primer; cancer; breast; ovarian; stomach;  
colon; hTR; ss.

Homo sapiens.

EP1158055-A1.

28-NOV-2001.

26-MAY-2000; 2000EP-00111370.

26-MAY-2000; 2000EP-00111370.

(CHEN/) CHEN X Q.

(STRO/) STROUN M.

(ANKE/) ANKER P.

Chen XQ, Stroun M, Anker P;

WPI; 2002-099090/14.

Accurate, reliable diagnosis and/or prognosis of cancer, e.g. breast  
cancer, by analyzing the RNA components of telomerase in plasma or serum.

Example; Col 3; 6pp; French.

The present invention relates to a method for diagnosing and/or  
monitoring the evolution of cancers. The method comprises analysing  
enzyme telomerase RNA in blood plasma or serum. The method is typically  
used for diagnosing breast, ovarian, stomach or colon cancer and/or  
monitoring the evolution of the cancers after treatment by chemotherapy  
or operations. The present sequence is a PCR primer for human telomerase  
RNA (hTR), which was used in the example from the present invention

Sequence 26 BP; 3 A; 6 C; 11 G; 6 T; 0 U; 0 Other;

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 59;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 60 GAAGGGCGTAGCGCGCGTCTTTTC 85  
Db 1 GAAGGGCGTAGCGCGCGTCTTTTC 26

RESULT 76  
ADG82593/c  
ID ADG82593 standard; DNA; 26 BP.

XX AC  
AC ADG82593;

DT 11-MAR-2004 (first entry)

Human telomerase gene, hTR, RT-PCR primer #2.

Human; ss; PCR; telomerase; cancer; pregnancy; fertility; neoplasm; hTR;  
RT-PCR; reverse transcriptase PCR; primer.

```

XX OS Homo sapiens.
XX PN US2003207404-A1.
XX PD 06-NOV-2003.
XX PF 29-JUN-2001; 2001US-00895606.
XX PR 09-SEP-1995; 95US-0003492P.
XX PR 05-JAN-1996; 96US-00583808.
XX PR 13-SEP-1996; 96US-00710249.
XX PR 23-DEC-1998; 98US-00220157.
XX PA (VILL/) VILLEPONTEAU B.
XX PA (FENG/) FENG J.
XX PA (ANDR/) ANDREWS W H.
XX PA (ADAM/) ADAMS R R.
XX PI Villeponteau B, Feng J, Andrews WH, Adams RR;
XX DR WPI; 2004-051519/05.
XX PT Novel monoclonal or isolated polyclonal antibody that specifically binds
XX PT human TPC2 or TPC3. useful for treating neoplasia.
XX PS Example D; SEQ ID NO 26; 62pp; English.
XX CC The invention relates to a monoclonal or isolated polyclonal antibody
XX CC specifically binds human TPC2 or TPC3 (not defined, appearing as ADG82569
XX CC and ADG82571). Also included are an antibody obtained by collecting
XX CC antiserum from a subject immunised with a peptide comprising at least 10
XX CC contiguous amino acids of TPC-2 or TPC-3, a host cell secreting the
XX CC antibody, a composition for obtaining a TPC2-specific antibody comprising
XX CC at least 10 contiguous amino acids ADG82569, a composition for obtaining
XX CC a TPC3-specific antibody, comprising at least 10 contiguous amino acids
XX CC of ADG82571, an isolated, recombinant or synthetic nucleic acid encoding
XX CC a peptide immunogenic for TPC2-specific antibody or TPC3-antibody and a
XX CC host cell containing the nucleic acid. The antibody is useful for
XX CC determining a condition in a subject associated with a high level of TPC2
XX CC or TPC3, and is useful for screening, diagnosing and monitoring
XX CC conditions such as cancer, pregnancy or fertility. The antibody is also
XX CC useful for treating conditions associated with inappropriate expression
XX CC of TPC2 or TPC3 such as neoplasia. The present sequence is a reverse
XX CC transcriptase (RT)-PCR primer used to analyse the expression profile of
XX CC the human telomerase gene, which is co-expressed with TPC-2 and TPC-3.
XX SQ Sequence 26 BP; 7 A; 3 C; 9 G; 7 T; 0 U; 0 Other;
Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 59;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 145 CTTCCACCGTTCATCTAGACAAAC 170
Db 26 CTTCCACCGTTCATCTAGACAAAC 1
RESULT 77
ADG82592
ID ADG82592 standard; DNA; 26 BP.
XX AC ADG82592;
XX AC 11-MAR-2004 (first entry)
XX DT Human telomerase gene, hTR, RT-PCR primer.
XX DE Human; ss; PCR; telomerase; cancer; pregnancy; fertility; neoplasm; hTR;
XX KW RT-PCR; reverse transcriptase PCR; primer.
XX OS Homo sapiens.
XX PN

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PN US2003207404-A1.
XX PD 06-NOV-2003.
XX PF 29-JUN-2001; 2001US-00895606.
XX PR 09-SEP-1995; 95US-0003492P.
XX PR 05-JAN-1996; 96US-00583808.
XX PR 13-SEP-1996; 96US-00710249.
XX PR 23-DEC-1998; 98US-00220157.
XX PA (VILL/) VILLEPONTEAU B.
XX PA (FENG/) FENG J.
XX PA (ANDR/) ANDREWS W H.
XX PA (ADAM/) ADAMS R R.
XX PI Villeponteau B, Feng J, Andrews WH, Adams RR;
XX DR WPI; 2004-051519/05.
XX PT Novel monoclonal or isolated polyclonal antibody that specifically binds
XX PT human TPC2 or TPC3. useful for treating neoplasia.
XX PS Example D; SEQ ID NO 25; 62pp; English.
XX CC The invention relates to a monoclonal or isolated polyclonal antibody
XX CC specifically binds human TPC2 or TPC3 (not defined, appearing as ADG82569
XX CC and ADG82571). Also included are an antibody obtained by collecting
XX CC antiserum from a subject immunised with a peptide comprising at least 10
XX CC contiguous amino acids of TPC-2 or TPC-3, a host cell secreting the
XX CC antibody, a composition for obtaining a TPC2-specific antibody comprising
XX CC at least 10 contiguous amino acids ADG82569, a composition for obtaining
XX CC a TPC3-specific antibody, comprising at least 10 contiguous amino acids
XX CC of ADG82571, an isolated, recombinant or synthetic nucleic acid encoding
XX CC a peptide immunogenic for TPC2-specific antibody or TPC3-antibody and a
XX CC host cell containing the nucleic acid. The antibody is useful for
XX CC determining a condition in a subject associated with a high level of TPC2
XX CC or TPC3, and is useful for screening, diagnosing and monitoring
XX CC conditions such as cancer, pregnancy or fertility. The antibody is also
XX CC useful for treating conditions associated with inappropriate expression
XX CC of TPC2 or TPC3 such as neoplasia. The present sequence is a reverse
XX CC transcriptase (RT)-PCR primer used to analyse the expression profile of
XX CC the human telomerase gene, which is co-expressed with TPC-2 and TPC-3.
XX SQ Sequence 26 BP; 8 A; 6 C; 7 G; 5 T; 0 U; 0 Other;
Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 59;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 45 TCTAACCCCTAACTGAGAGGCGGTAG 70
Db 1 TCTAACCCCTAACTGAGAGGCGGTAG 26
RESULT 78
AAZ07280/c
ID AAZ07280 standard; DNA; 25 BP.
XX AC AAZ07280;
XX AC 22-OCT-1999 (first entry)
XX DT Human telomerase RNA gene (hTR) specific primer TRC3R.
XX DE Human telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;
XX KW gene therapy; thymidine kinase gene; anticancer therapy; human;
XX KW PCR primer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN WO9938964-A2.

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OS Homo sapiens.  
 XX US294650-B1.  
 XX  
 XX  
 PD 25-SEP-2001.  
 XX  
 XX 08-JUL-1999; 99US-00349532.  
 XX  
 XX 09-APR-1996; 96US-00630019.  
 PR 09-APR-1997; 97US-00838545.  
 XX  
 XX (TEXA ) UNIV TEXAS SYSTEM.  
 XX  
 XX Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;  
 XX WPI; 2001-638024/73.  
 XX  
 XX New peptide nucleic acids that hybridizes to the RNA component of  
 PT mammalian telomerase, useful for treating or preventing cancer, or  
 PT inflammation, lymphoproliferative diseases, autoimmune disease, or  
 PT neurodegenerative diseases.  
 XX  
 XX Example 1; Col 29; 46pp; English.  
 PS  
 XX The present invention relates to peptide nucleic acids (PNAs), comprising  
 CC a sequence of 6-25 nucleobases, that inhibit telomerase activity in  
 CC mammalian cells by hybridising to the RNA component of mammalian  
 CC telomerase. The PNAs are useful as probes to detect the RNA component of  
 CC mammalian telomerase and as inhibitors of telomerase activity, or to  
 CC detect and/or quantitate polynucleotide having the human telomerase RNA  
 CC component (hTR) sequence, as well as in forensic identification of  
 CC individuals, such as paternity testing or identification of criminal  
 CC suspects or unknown descendants based on the hTR gene RFLP pattern. The  
 CC PNA can be further used for treating or preventing cancer, inflammation,  
 CC lymphoproliferative diseases, autoimmune disease, or neurodegenerative  
 CC diseases. The PNAs in combination with other pharmaceuticals (such as  
 CC antineoplastic or cytostatic agents) can be used for treating neoplasia,  
 CC hyperplasia, human immunodeficiency virus (HIV) infections, acquired  
 CC immunodeficiency syndrome (AIDS) and associated pathologies, and other  
 CC diseases characterised by abnormal telomere metabolism or telomerase  
 CC activity. The present sequence representing hTR RNA strand #1 is used to  
 CC test the inhibition of telomerase activity by the PNAs of the present  
 CC invention  
 XX  
 XX Sequence 25 BP; 7 A; 5 C; 6 G; 0 T; 7 U; 0 Other;  
 SQ Query Match 5.5%; Score 25; DB 1; Length 25;  
 Best Local Similarity 72.0%; Pred. No. 68;  
 Matches 18; Conservative 7; Mismatches 0; Indels 0; Gaps 0;  
 Qy 41 TTTGTCTAACCTTAACGTGAGAAGG 65  
 Db 1 UUGUCUAACCCUACUGAGAAGG 25  
 RESULT 81  
 AAC93100/c  
 ID AAC93100 standard; DNA; 25 BP.  
 XX  
 XX AAC933100;  
 AC  
 XX 23-MAR-2001 (first entry)  
 DT  
 XX Human telomerase PCR primer #1.  
 DE  
 XX Telomerase; cancer; telomere damage; PCR primer; ss.  
 KW  
 XX Homo sapiens.  
 OS  
 XX WO200074667-A2.  
 XX  
 XX 14-DEC-2000.  
 PD  
 XX

PF 05-JUN-2000; 2000WO-US015544.  
 XX  
 XX 04-JUN-1999; 99US-0137549P.  
 XX  
 XX (AUJL/) AU J L.  
 PA (WIEN/) WIENTJES G.  
 XX  
 XX Au JL, Wientjes G;  
 PI WPI; 2001-071022/08.  
 XX  
 XX Inhibiting or reducing growth of cell for treating cancer, comprising  
 PT administering telomere damage-inducing agent and telomerase inhibitory  
 PT agent to the cell.  
 XX  
 XX Example 7; Page 62; 97pp; English.  
 PS  
 XX The present invention provides a method for inhibiting or reducing the  
 CC growth of a cell which involves administering to the cell a telomere  
 CC damage inducing agent and a telomerase inhibitory agent. This can be used  
 CC in the treatment of aberrant cell growth, including cancers  
 XX  
 XX Sequence 25 BP; 4 A; 5 C; 4 G; 12 T; 0 U; 0 Other;  
 SQ Query Match 5.5%; Score 25; DB 1; Length 25;  
 Best Local Similarity 100.0%; Pred. No. 68;  
 Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 161 TAGACGAAACAAAAAATGTCAGCTG 185  
 Db 25 TAGACGAAACAAAAAATGTCAGCTG 1  
 RESULT 82  
 AAV41169/c  
 ID AAV41169 standard; DNA; 30 BP.  
 XX  
 XX AAV41169;  
 AC  
 XX 08-OCT-1998 (first entry)  
 DT  
 XX RNA component of human telomerase (hTR) antisense oligo 14.  
 DE  
 XX RNA component; human telomerase; antisense oligonucleotide; infection;  
 KW neuroblastoma; bladder cancer; colon cancer; prostate cancer; cancer;  
 KW contraception; sterilisation; immunosuppression; therapeutic; hTR;  
 KW immune system down-regulation; anti-inflammatory therapy; ss.  
 XX  
 XX Synthetic.  
 OS  
 XX Homo sapiens.  
 XX  
 XX WO9828442-A1.  
 PN  
 XX 02-JUL-1998.  
 PD  
 XX 19-DEC-1997; 97WO-US023619.  
 PF  
 XX 20-DEC-1996; 96US-00770564.  
 XX  
 XX 20-DEC-1996; 96US-00770565.  
 PR  
 XX (GERO-) GERON CORP.  
 XX  
 XX Kim NW, Wu F, Kealey JT, Pruzan R, Weinrich SL;  
 PI WPI; 1998-377670/32.  
 XX  
 XX New polynucleotide(s) anti:sense to human telomerase - used for detecting  
 PT or inhibiting human telomerase, e.g. for treating cancers, contraception,  
 PT immuno-suppression or treating infection.  
 XX  
 XX Claim 11; Page 65; 80pp; English.  
 PS  
 XX Sequences shown in AAV41169 to AAV41181 represent antisense  
 CC



```

Qy 311 CTCGTCTAGCCGCGGGTCTCTCGG 334
Db 24 CTCGTCTAGCCGCGGGTCTCTCGG 1

RESULT 85
AAV68465/c
ID AAV68465 standard; DNA; 24 BP.
XX AC AAV68465;
XX DT 22-MAR-1999 (first entry)
XX DE Human telomerase RNA (hTR) amplifying RT-PCR primer.
XX KW Human; telomerase; hTR; activator-antisense complex; malignant; enzyme;
KW cleave; brain; tumour malignant glioma; breast tumour; renal cell cancer;
KW melanoma; prostate cancer; leukemia; polychemia vera; myeloma; sarcoma;
KW Hodgkin's lymphoma; Waldenstrom's macroglobulinemia; heavy chain disease;
KW carcinoma; chemotherapeutic; antisense; RT-PCR; primer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX FN WO9847911-A1.
XX PD 29-OCT-1998.
XX PF 13-APR-1998; 98WO-US007397.
XX PR 21-APR-1997; 97US-0044507P.
XX PR 03-FEB-1998; 98US-00018125.
XX PA (CLEV-) CLEVELAND CLINIC FOUND.
XX PA (USSH ) US NAT INST OF HEALTH.
XX PI Silverman RH, Kondo S, Cowell JK, Li G, Torrence PF;
XX WPI; 1998-609972/51.
XX DR New RNase L activator-telomerase antisense complex - useful to inhibit
XX PT telomerase activity in telomerase-expressing malignancies.
XX PS Example; Page 41; 81pp; English.
XX CC Primers AAV68464-65 are used for the RT-PCR amplification of the RNA
XX CC component of human telomerase (hTR). The invention relates to an
XX CC activator-antisense complex that comprises: (a) an antisense
XX CC oligonucleotide, complementary to a 12-25 nucleotide portion of hTR, with
XX CC a hydroxyl moiety at the first end; and (b) a linker attached to the
XX CC first end, and (c) an activator of RNase L attached to the linker. The
XX CC activator-antisense complex may be used for inhibiting the growth of a
XX CC telomerase-expressing malignant cell or tumour. The complex is used to
XX CC specifically cleave the ribonucleotide portion of a telomerase enzyme.
XX CC The complex inhibits growth of telomerase expressing malignant cells from
XX CC brain tumour malignant glioma, breast tumour, renal cell cancer,
XX CC melanoma, and prostate cancer. Many other malignancies and related
XX CC disorders, may be treated including various acute and chronic leukemias,
XX CC polychemia vera, Hodgkin's and non-Hodgkin's lymphomas, multiple
XX CC myeloma, Waldenstrom's macroglobulinemia, heavy chain disease, and solid
XX CC tumours, including numerous sarcomas and carcinomas. The complex is
XX CC preferably administered in combination with a chemotherapeutic agent,
XX CC particularly either cisplatin, doxorubicin, mitomycin, daunorubicin,
XX CC bleomycin, actinomycin D, or neocarzinostatin
XX SQ Sequence 24 BP; 3 A; 6 C; 10 G; 5 T; 0 U; 0 Other;

Query Match 5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 78;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 423 CGTGACCCAGGACTCGGCTCACA 446
Db 24 CGTGACCCAGGACTCGGCTCACA 1

RESULT 86
AAV68464
ID AAV68464 standard; DNA; 24 BP.
XX AC AAV68464;
XX DT 22-MAR-1999 (first entry)
XX DE Human telomerase RNA (hTR) amplifying RT-PCR primer.
XX KW Human; telomerase; hTR; activator-antisense complex; malignant; enzyme;
KW cleave; brain; tumour malignant glioma; breast tumour; renal cell cancer;
KW melanoma; prostate cancer; leukemia; polychemia vera; myeloma; sarcoma;
KW Hodgkin's lymphoma; Waldenstrom's macroglobulinemia; heavy chain disease;
KW carcinoma; chemotherapeutic; antisense; RT-PCR; primer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX FN WO9847911-A1.
XX PD 29-OCT-1998.
XX PF 13-APR-1998; 98WO-US007397.
XX PR 21-APR-1997; 97US-0044507P.
XX PR 03-FEB-1998; 98US-00018125.
XX PA (CLEV-) CLEVELAND CLINIC FOUND.
XX PA (USSH ) US NAT INST OF HEALTH.
XX PI Silverman RH, Kondo S, Cowell JK, Li G, Torrence PF;
XX WPI; 1998-609972/51.
XX DR New RNase L activator-telomerase antisense complex - useful to inhibit
XX PT telomerase activity in telomerase-expressing malignancies.
XX PS Example; Page 41; 81pp; English.
XX CC Primers AAV68464-65 are used for the RT-PCR amplification of the RNA
XX CC component of human telomerase (hTR). The invention relates to an
XX CC activator-antisense complex that comprises: (a) an antisense
XX CC oligonucleotide, complementary to a 12-25 nucleotide portion of hTR, with
XX CC a hydroxyl moiety at the first end; and (b) a linker attached to the
XX CC first end, and (c) an activator of RNase L attached to the linker. The
XX CC activator-antisense complex may be used for inhibiting the growth of a
XX CC telomerase-expressing malignant cell or tumour. The complex is used to
XX CC specifically cleave the ribonucleotide portion of a telomerase enzyme.
XX CC The complex inhibits growth of telomerase expressing malignant cells from
XX CC brain tumour malignant glioma, breast tumour, renal cell cancer,
XX CC melanoma, and prostate cancer. Many other malignancies and related
XX CC disorders, may be treated including various acute and chronic leukemias,
XX CC polychemia vera, Hodgkin's and non-Hodgkin's lymphomas, multiple
XX CC myeloma, Waldenstrom's macroglobulinemia, heavy chain disease, and solid
XX CC tumours, including numerous sarcomas and carcinomas. The complex is
XX CC preferably administered in combination with a chemotherapeutic agent,
XX CC particularly either cisplatin, doxorubicin, mitomycin, daunorubicin,
XX CC bleomycin, actinomycin D, or neocarzinostatin
XX SQ Sequence 24 BP; 7 A; 5 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 78;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 41 TTTGTCTTAACCCCTAAGGAGG 64
Db 1 TTTGTCTTAACCCCTAAGGAGG 24

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RESULT 87
AAZ07273/c
ID AAZ07273 standard; DNA; 24 BP.
XX
XX
AC AAZ07273;
XX
AC AAZ07273;
XX
DT 22-OCT-1999 (first entry)
XX
DE Human telomerase RNA gene (hTR) specific primer hTR5.
XX
XX Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;
KW gene therapy; thymidine kinase gene; anticancer therapy; human;
KW PCR primer; ss.
XX
XX Synthetic.
OS Homo sapiens.
XX
XX WO9938964-A2.
PN
XX
XX 05-AUG-1999.
PD
XX
XX 29-JAN-1999; 99WO-GB000308.
PF
XX
XX 29-JAN-1998; 98GB-00001902.
PR
XX
XX (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.
PA
XX
XX Keith WN;
PI
XX
XX WPI; 1999-479183/40.
DR
XX
XX Mouse and human telomerase RNA gene promoters, useful for tumor specific
PT gene therapy.
PT
XX
XX Disclosure; Fig 6; 109pp; English.
PS
XX
XX The invention relates to promoter regions from mouse and human telomerase
CC RNA (TR) component genes. The TR gene promoter can be linked to a
CC heterologous gene, especially a gene encoding a cytotoxin, for therapy of
CC cancer, especially neoplasias. The telomerase is necessary for the
CC unrestricted proliferative capacity of many human cancers. Mutation or
CC dysregulation of the telomerase repression pathway may cause reactivation
CC of upregulation of telomerase expression in cancer. Substances,
CC identified in the methods, can be used to block transcription from the TR
CC gene promoter through interaction of the 5' regulatory sequences. These
CC substances, e.g. antisense oligonucleotides, transcription factors,
CC peptide nucleic acids and factors that disrupt signal transduction, are
CC useful for cancer therapy. In particular, gene therapy vectors
CC (especially pG62-codAupp) comprising the promoter and a viral thymidine
CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that
CC neoplasia can be controlled or treated. Direct down-regulation of
CC telomerase RNA gene through manipulation of transcription factors may be
CC effective anticancer therapy and the cloning of the hTR gene promoter
CC allows the analysis of therapeutic molecules which modulate hTR promoter
CC activity. Sequences AAZ07623-80 represents PCR primers for amplifying
CC human TR gene (hTR) promoter sequence
XX
XX Sequence 24 BP; 4 A; 6 C; 6 G; 8 T; 0 U; 0 Other;
SQ
Query Match 5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 78;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 46 CTAACCCCTAACTGAGAGGGCGTA 69
DB 24 CTAACCCCTAACTGAGAGGGCGTA 1
RESULT 88
AAZ07263/c
ID AAZ07263 standard; DNA; 24 BP.
XX
XX
AC AAZ07263;
XX
AC AAZ07263;
XX
DT 22-OCT-1999 (first entry)
XX
DE Human telomerase RNA gene (hTR) specific primer hTR5.
XX
XX Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;
KW gene therapy; thymidine kinase gene; anticancer therapy; human;
KW PCR primer; ss.
XX
XX Synthetic.
OS Homo sapiens.
XX
XX WO9938964-A2.
PN
XX
XX 05-AUG-1999.
PD
XX
XX 29-JAN-1999; 99WO-GB000308.
PF
XX
XX 29-JAN-1998; 98GB-00001902.
PR
XX
XX (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.
PA
XX
XX Keith WN;
PI
XX
XX WPI; 1999-479183/40.
DR
XX
XX Mouse and human telomerase RNA gene promoters, useful for tumor specific
PT gene therapy.
PT
XX
XX Disclosure; Fig 6; 109pp; English.
PS
XX
XX The invention relates to promoter regions from mouse and human telomerase
CC RNA (TR) component genes. The TR gene promoter can be linked to a
CC heterologous gene, especially a gene encoding a cytotoxin, for therapy of
CC cancer, especially neoplasias. The telomerase is necessary for the
CC unrestricted proliferative capacity of many human cancers. Mutation or
CC dysregulation of the telomerase repression pathway may cause reactivation
CC of upregulation of telomerase expression in cancer. Substances,
CC identified in the methods, can be used to block transcription from the TR
CC gene promoter through interaction of the 5' regulatory sequences. These
CC substances, e.g. antisense oligonucleotides, transcription factors, are
CC peptide nucleic acids and factors that disrupt signal transduction, are
CC useful for cancer therapy. In particular, gene therapy vectors
CC (especially pG62-codAupp) comprising the promoter and a viral thymidine
CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that
CC neoplasia can be controlled or treated. Direct down-regulation of
CC telomerase RNA gene through manipulation of transcription factors may be
CC effective anticancer therapy and the cloning of the hTR gene promoter
CC allows the analysis of therapeutic molecules which modulate hTR promoter
CC activity. Sequences AAZ07623-80 represents PCR primers for amplifying
CC human TR gene (hTR) promoter sequence
XX
XX Sequence 24 BP; 4 A; 6 C; 6 G; 8 T; 0 U; 0 Other;
SQ
Query Match 5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 78;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 46 CTAACCCCTAACTGAGAGGGCGTA 69
DB 24 CTAACCCCTAACTGAGAGGGCGTA 1
RESULT 89
AAZ07279
ID AAZ07279 standard; DNA; 24 BP.
XX
XX
AC AAZ07279;
XX
AC AAZ07279;
XX
DT 22-OCT-1999 (first entry)
XX
XX
```

```
XX
AC AAZ07263;
XX
DT 22-OCT-1999 (first entry)
XX
DE Human telomerase RNA gene (hTR) specific primer hTR5.
XX
XX Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;
KW gene therapy; thymidine kinase gene; anticancer therapy; human;
KW PCR primer; ss.
XX
XX Synthetic.
OS Homo sapiens.
XX
XX WO9938964-A2.
PN
XX
XX 05-AUG-1999.
PD
XX
XX 29-JAN-1999; 99WO-GB000308.
PF
XX
XX 29-JAN-1998; 98GB-00001902.
PR
XX
XX (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.
PA
XX
XX Keith WN;
PI
XX
XX WPI; 1999-479183/40.
DR
XX
XX Mouse and human telomerase RNA gene promoters, useful for tumor specific
PT gene therapy.
PT
XX
XX Disclosure; Fig 6; 109pp; English.
PS
XX
XX The invention relates to promoter regions from mouse and human telomerase
CC RNA (TR) component genes. The TR gene promoter can be linked to a
CC heterologous gene, especially a gene encoding a cytotoxin, for therapy of
CC cancer, especially neoplasias. The telomerase is necessary for the
CC unrestricted proliferative capacity of many human cancers. Mutation or
CC dysregulation of the telomerase repression pathway may cause reactivation
CC of upregulation of telomerase expression in cancer. Substances,
CC identified in the methods, can be used to block transcription from the TR
CC gene promoter through interaction of the 5' regulatory sequences. These
CC substances, e.g. antisense oligonucleotides, transcription factors,
CC peptide nucleic acids and factors that disrupt signal transduction, are
CC useful for cancer therapy. In particular, gene therapy vectors
CC (especially pG62-codAupp) comprising the promoter and a viral thymidine
CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that
CC neoplasia can be controlled or treated. Direct down-regulation of
CC telomerase RNA gene through manipulation of transcription factors may be
CC effective anticancer therapy and the cloning of the hTR gene promoter
CC allows the analysis of therapeutic molecules which modulate hTR promoter
CC activity. Sequences AAZ07623-80 represents PCR primers for amplifying
CC human TR gene (hTR) promoter sequence
XX
XX Sequence 24 BP; 4 A; 6 C; 6 G; 8 T; 0 U; 0 Other;
SQ
Query Match 5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 78;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 46 CTAACCCCTAACTGAGAGGGCGTA 69
DB 24 CTAACCCCTAACTGAGAGGGCGTA 1
RESULT 89
AAZ07279
ID AAZ07279 standard; DNA; 24 BP.
XX
XX
AC AAZ07279;
XX
AC AAZ07279;
XX
DT 22-OCT-1999 (first entry)
XX
XX
```



```
RESULT 91
AAS15445
ID AAS15445 standard; DNA; 24 BP.
XX AC
XX AAS15445;
XX DT
XX 14-FEB-2002 (first entry)
XX DE
XX Oligonucleotide #1 used in melting temperature studies of PNAs.
XX Mammalian; paternity testing; human telomerase RNA component;
XX hTR gene RFLP pattern; cancer; inflammation; forensic;
XX lymphoproliferative disease; autoimmune disease; hyperplasia;
XX neurodegenerative disease; neoplasia; HIV; AIDS; cytostatic;
XX human immunodeficiency virus; acquired immunodeficiency syndrome;
XX telomere metabolism; anti-inflammatory; immunosuppressive; ss.
XX OS
XX Homo sapiens.
XX OS
XX Synthetic.
XX PN
XX US6294650-B1.
XX PD
XX 25-SEP-2001.
XX PF
XX 08-JUL-1999; 99US-00349532.
XX PR
XX 09-APR-1996; 96US-00630019.
XX PR
XX 09-APR-1997; 97US-00838545.
XX PA
XX (TEXA ) UNIV TEXAS SYSTEM.
XX PI
XX Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;
XX WPI; 2001-638024/73.
XX DR
XX
XX New peptide nucleic acids that hybridizes to the RNA component of
XX mammalian telomerase, useful for treating or preventing cancer,
XX PT inflammation, lymphoproliferative diseases, autoimmune disease, or
XX PT neurodegenerative diseases.
XX PS
XX Example 2; Col 34; 46pp; English.
XX CC
XX The present invention relates to peptide nucleic acids (PNAs), comprising
XX a sequence of 6-25 nucleobases, that inhibit telomerase activity in
XX mammalian cells by hybridising to the RNA component of mammalian
XX telomerase. The PNAs are useful as probes to detect the RNA component of
XX mammalian telomerase and as inhibitors of telomerase activity. Or to
XX detect and/or quantitate polynucleotide having the human telomerase RNA
XX component (hTR) sequence, as well as in forensic identification of
XX individuals, such as paternity testing or identification of criminal
XX suspects or unknown descendants based on the hTR gene RFLP pattern. The
XX PNA can be further used for treating or preventing cancer, inflammation,
XX lymphoproliferative diseases, autoimmune disease, or neurodegenerative
XX diseases. The PNAs in combination with other pharmaceuticals (such as
XX antineoplastic or cytostatic agents) can be used for treating neoplasia,
XX hyperplasia, human immunodeficiency virus (HIV) infections, acquired
XX immunodeficiency syndrome (AIDS) and associated pathologies, and other
XX diseases characterised by abnormal telomere metabolism or telomerase
XX activity. The present sequence representing a DNA oligonucleotide is
XX complementary to some of the PNAs of the present invention, and is used
XX in melting temperature studies
XX SQ
XX Sequence 24 BP; 7 A; 5 C; 5 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 5.3%; Score 24; DB 1; Length 24;
XX Best Local Similarity 100.0%; Pred. No. 78;
XX Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 41 TTTGTCTAACCTTAAGGAGG 64
XX 1 TTTGTCTAACCTTAAGGAGG 24
XX
XX RESULT 92
ADQ36831
ID ADQ36831 standard; DNA; 24 BP.
XX AC
XX ADQ36831;
XX DT
XX 26-AUG-2004 (first entry)
XX DE
XX Primer of the invention #3.
XX KW
XX Adenovirus vector; cancer; anti-cancer; ps-hTERT-TK; suicide gene;
XX KW HSV-TK; human telomerase; hTERT promoter; bovine growth hormone; BGH;
XX KW Adenovirus clone; Ad-hT-TK; Cytostatic; ss.
XX OS
XX Unidentified.
XX PN
XX KR2004002322-A.
XX XX
XX 07-JAN-2004.
XX PF
XX 27-JUN-2002; 2002KR-00038076.
XX PR
XX 27-JUN-2002; 2002KR-00038076.
XX PA
XX (KIMY/) KIM Y T.
XX PA (SONG/) SONG J S.
XX XX
XX Kim YT, Song JS;
XX XX
XX WPI; 2004-363161/34.
XX PT
XX New adenovirus vector comprising telomerase promoter, useful in the
XX treatment of cancer.
XX PS
XX Disclosure; SEQ ID NO 3; lpp; Korean.
XX CC
XX Provided are an Adenovirus vector with a telomerase promoter associated
XX with cancer occurrence and a method for using the same for anti-cancer
XX treatment. An Adenovirus expression vector ps-hTERT-TK is produced by
XX using an expression cassette consisting of suicide gene HSV-TK, as late
XX polyadenylation signal for human telomerase hTERT promoter and bovine
XX growth hormone(BGH). Adenovirus clone Ad-hT-TK(KCCM 10387) is used for
XX anti-cancer gene therapy. The present sequence represents a primer of the
XX invention.
XX SQ
XX Sequence 24 BP; 7 A; 5 C; 5 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 5.3%; Score 24; DB 1; Length 24;
XX Best Local Similarity 100.0%; Pred. No. 78;
XX Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 41 TTTGTCTAACCTTAAGGAGG 64
XX 1 TTTGTCTAACCTTAAGGAGG 24
XX
XX RESULT 93
AAZ08704/c
ID AAZ08704 standard; DNA; 25 BP.
XX AC
XX AAZ08704;
XX DT
XX 20-OCT-1999 (first entry)
XX DE
XX Human telomerase RNA template PCR primer R3C.
XX KW
XX Telomerase; body fluid; cancer; tumour; screening; TRAP; diagnosis;
XX KW telomeric repeat amplification protocol; detection; PCR primer; ss.
XX OS
XX Synthetic.
XX OS
XX Homo sapiens.
XX XX
XX WO9941406-A1.
```

XX PD 19-AUG-1999.  
 XX XX  
 XX PF 16-FEB-1999; 99WO-US003302.  
 XX PR 16-FEB-1998; 98US-0074793P.  
 XX PA (UYMA-) UNIV MARYLAND BALTIMORE.  
 XX PI Strovel JW, Starnberg J, Highsmith E, Abruzzo LV;  
 XX DR WPI; 1999-508655/42.  
 XX PT Detecting telomerase activity in non-cellular body fluid using a modified  
 XX PT telomeric repeat amplification protocol.  
 XX PS Disclosure; Page 16; 32pp; English.  
 XX CC A method has been developed for detecting telomerase activity in a non-  
 CC cellular portion of body fluid from a cancer patient using a modified  
 CC telomeric repeat amplification protocol (TRAP). A method for detecting  
 CC cancer comprises: (a) removing the cellular portion of a body fluid  
 CC specimen from the patient; (b) preparing a protein extract from the body  
 CC fluid remainder; (c) assaying the extract for the presence and quantity  
 CC of telomerase RNA or telomerase activity; and (d) comparing the results  
 CC with normal levels, to determine the presence of cancer. The methods are  
 CC used in cancer diagnosis and prognosis, and also to monitor cancer  
 CC therapy effectiveness. Unlike prior art telomerase activity assays in  
 CC cancer patients, the method allows noninvasive sample collection. The  
 CC methods are also more reliable and less tumour specific than other  
 CC methods which detect circulating tumour markers. The present sequence  
 CC represents a human telomerase RNA template PCR primer used in the  
 CC exemplification of the present invention  
 XX  
 XX SQ Sequence 25 BP; 7 A; 3 C; 9 G; 6 T; 0 U; 0 Other;  
 Query Match 5.3%; Score 24; DB 1; Length 25;  
 Best Local Similarity 100.0%; Pred. No. 82;  
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 145 CTTCCACCGTTCATTCTAGACAA 168  
 Db |||||  
 25 CTTCCACCGTTCATTCTAGACAA 2  
 RESULT 94  
 AAT89246  
 ID AAT89246 standard; DNA; 23 BP.  
 XX AC AAT89246;  
 XX DT 12-MAY-1998 (first entry)  
 XX DE DNA oligonucleotide 2, used in the measurement of Tm values.  
 XX KW Peptide nucleic acid; PNA; cancer; telomerase; probe; hybridisation;  
 XX KW inhibitor; human telomerase RNA; hTR; PCR; oligonucleotide; ss.  
 XX OS Synthetic.  
 XX PN WO9738013-A1.  
 XX PD 16-OCT-1997.  
 XX PF 09-APR-1997; 97WO-US005931.  
 XX PR 09-APR-1996; 96US-00630019.  
 XX PA (GERO-) GERON CORP.  
 XX PI Shay JW, Wright WE, Piatyszek MA, Corey D, Norton JC;  
 XX DR WPI; 1997-512647/47.  
 Query Match 5.1%; Score 23; DB 1; Length 23;  
 Best Local Similarity 100.0%; Pred. No. 89;  
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 35 CCATTTTTCCTAACCCCTAACT 57  
 Db |||||  
 1 CCATTTTTCCTAACCCCTAACT 23  
 RESULT 95  
 AAA37568  
 ID AAA37568 standard; DNA; 23 BP.  
 XX AC AAA37568;  
 XX DT 15-AUG-2000 (first entry)  
 XX DE PNA sequence #26 used to inhibit telomerase activity.  
 XX KW Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;  
 KW inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;  
 KW AIDS; HIV; fungal infection; forensic identification; detect; tumour;  
 KW paternity testing; ss.  
 XX OS Synthetic.  
 XX FH Key Location/Qualifiers  
 FT misc\_feature 1..23  
 FT /\*tag= a  
 FT /note= "Peptide nucleic acid molecule, where N-(2-  
 FT aminosthyl)glycine units are linked to nucleotide bases  
 FT via glycine amino N through a methylenecarbonyl linker"  
 XX PN US6046307-A.  
 XX PD 04-APR-2000.  
 XX PF 09-APR-1997; 97US-00838545.  
 XX PR 09-APR-1996; 96US-00630019.  
 XX PA (TEXA ) UNIV TEXAS SYSTEM.  
 XX PI Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;  
 XX DR WPI; 2000-292432/25.  
 XX PT New peptide nucleic acid (PNA) compounds that inhibit telomerase activity  
 XX PT in mammalian cells is useful as probes to detect the RNA component of a  
 XX PT mammalian telomerase.  
 XX PS Example 2; Col 33; 45pp; English.  
 XX CC The present sequence represents a peptide nucleic acid molecule which  
 CC hybridises to the mRNA component of mammalian telomerase, and inhibits  
 CC telomerase activity. Telomerase is a ribonucleoprotein enzyme that

XX PT New peptide nucleic acids hybridising to mammalian telomerase RNA - used  
 XX PT to inhibit telomerase, for treating tumours and other proliferative  
 XX PT diseases, also for diagnosis.  
 XX PS Example 2; Page 49; 76pp; English.  
 XX CC This is an oligonucleotide used in the measurement of Tm values and their  
 CC complementary peptide nucleic acids (PNAs), (e.g. AAT89225-T89227). PNAs  
 CC hybridise specifically to an RNA component of mammalian telomerase, and  
 CC include the sequence GGG for specific hybridisation to the template  
 CC region of this component. PNAs can be used as probes to detect the RNA  
 CC component of mammalian telomerase and as inhibitors of telomerase  
 CC activity, especially in the treatment of cancer  
 XX  
 XX SQ Sequence 23 BP; 5 A; 7 C; 1 G; 10 T; 0 U; 0 Other;  
 Query Match 5.1%; Score 23; DB 1; Length 23;  
 Best Local Similarity 100.0%; Pred. No. 89;  
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 35 CCATTTTTCCTAACCCCTAACT 57  
 Db |||||  
 1 CCATTTTTCCTAACCCCTAACT 23  
 RESULT 95  
 AAA37568  
 ID AAA37568 standard; DNA; 23 BP.  
 XX AC AAA37568;  
 XX DT 15-AUG-2000 (first entry)  
 XX DE PNA sequence #26 used to inhibit telomerase activity.  
 XX KW Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;  
 KW inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;  
 KW AIDS; HIV; fungal infection; forensic identification; detect; tumour;  
 KW paternity testing; ss.  
 XX OS Synthetic.  
 XX FH Key Location/Qualifiers  
 FT misc\_feature 1..23  
 FT /\*tag= a  
 FT /note= "Peptide nucleic acid molecule, where N-(2-  
 FT aminosthyl)glycine units are linked to nucleotide bases  
 FT via glycine amino N through a methylenecarbonyl linker"  
 XX PN US6046307-A.  
 XX PD 04-APR-2000.  
 XX PF 09-APR-1997; 97US-00838545.  
 XX PR 09-APR-1996; 96US-00630019.  
 XX PA (TEXA ) UNIV TEXAS SYSTEM.  
 XX PI Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;  
 XX DR WPI; 2000-292432/25.  
 XX PT New peptide nucleic acid (PNA) compounds that inhibit telomerase activity  
 XX PT in mammalian cells is useful as probes to detect the RNA component of a  
 XX PT mammalian telomerase.  
 XX PS Example 2; Col 33; 45pp; English.  
 XX CC The present sequence represents a peptide nucleic acid molecule which  
 CC hybridises to the mRNA component of mammalian telomerase, and inhibits  
 CC telomerase activity. Telomerase is a ribonucleoprotein enzyme that

CC synthesizes one strand of the telomeric DNA, using as a template an 11  
CC nucleotide sequence contained within the RNA component of the enzyme. The  
CC invention relates to PNA molecules having a sequence of no more than 25  
CC bases, which include the sequence GTTAGG. The uncharged nature of the PNA  
CC backbone increases the melting temperature of associating strands,  
CC affords greater resistance of degradation by proteases or nucleases. The  
CC therapeutic PNAs may be used for treating disease conditions such as  
CC cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human  
CC immunodeficiency virus (HIV) infection/AIDS (acquired immunodeficiency  
CC syndrome) and associated pathologies, fungal infections, and other  
CC diseases characterized by abnormal telomere metabolism or telomerase  
CC activity, in combination with antineoplastic and other cytotoxic or  
CC cytostatic agents, antifungal agents, and other nucleotides. PNAs may be  
CC used for molecular diagnostics, labelled PNAs are used as hybridization  
CC probes to detect or quantitate polynucleotides having a human telomerase  
CC RNA (hTR) sequence. PNA probes are also used for forensic identification  
CC of individuals, e.g. paternity testing, based on hTR gene restriction  
CC fragment length polymorphism (RFLP) pattern. PNAs are also useful as  
CC inhibitors of telomerase activity. The method of the present invention  
CC allows cancerous conditions to be detected with increased confidence and  
CC possibly at an earlier stage, before cells are detected as cancerous  
CC based on pathological characteristics. The diagnostic and prognostic  
CC methods of the present invention can be used to detect an immortal or  
CC neoplastic cell or tumour tissue or cancer of any origin, provided the  
CC cell expresses telomerase activity and its RNA component

XX  
SQ Sequence 23 BP; 5 A; 7 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 5.1%; Score 23; DB 1; Length 23;  
Best Local Similarity 100.0%; Pred. No. 89;  
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 35 CCATTTTGTCTAACCCCTAACT 57  
|||||  
Db 1 CCATTTTGTCTAACCCCTAACT 23

RESULT 96  
AAS15446  
ID AAS15446 standard; DNA; 23 BP.

XX AC AAS15446;

DT 14-FEB-2002 (first entry)

XX Oligonucleotide #2 used in melting temperature studies of PNAs.

XX Mammalian; paternity testing; human telomerase RNA component;  
KW hTR gene RFLP pattern; cancer; inflammation; forensic;  
KW lymphoproliferative disease; autoimmune disease; hyperplasia;  
KW neurodegenerative disease; neoplasia; HIV; AIDS; cytostatic;  
KW human immunodeficiency virus; acquired immunodeficiency syndrome;  
KW telomere metabolism; anti-inflammatory; immunosuppressive; ss.

XX Homo sapiens.

OS Synthetic.

XX US6294650-B1.

XX 25-SEP-2001.

XX 08-JUL-1999; 99US-00349532.

XX 09-APR-1996; 96US-00630019.

PR 09-APR-1997; 97US-00838545.

XX (TEXA ) UNIV TEXAS SYSTEM.

XX Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;

XX WPI; 2001-638024/73.

XX New peptide nucleic acids that hybridizes to the RNA component of  
PT mammalian telomerase, useful for treating or preventing cancer, or  
PT inflammation, lymphoproliferative diseases, autoimmune disease, or  
PT neurodegenerative diseases.

PS Example 2; Col 34; 46pp; English.

XX The present invention relates to peptide nucleic acids (PNAs), comprising  
CC a sequence of 6-25 nucleobases, that inhibit telomerase activity in  
CC mammalian cells by hybridising to the RNA component of mammalian  
CC telomerase. The PNAs are useful as probes to detect the RNA component of  
CC mammalian telomerase and as inhibitors of telomerase activity, or to  
CC detect and/or quantitate polynucleotide having the human telomerase RNA  
CC component (hTR) sequence, as well as in forensic identification of  
CC individuals, such as paternity testing or identification of criminal  
CC suspects or unknown descendants based on the hTR gene RFLP pattern. The  
CC PNA can be further used for treating or preventing cancer, inflammation,  
CC lymphoproliferative diseases, autoimmune disease, or neurodegenerative  
CC diseases. The PNAs in combination with other pharmaceuticals (such as  
CC antineoplastic or cytostatic agents) can be used for treating neoplasia,  
CC hyperplasia, human immunodeficiency virus (HIV) infections, acquired  
CC immunodeficiency syndrome (AIDS) and associated pathologies, and other  
CC diseases characterised by abnormal telomere metabolism or telomerase  
CC activity. The present sequence representing a DNA oligonucleotide is  
CC complementary to some of the PNAs of the present invention, and is used  
CC in melting temperature studies

XX Sequence 23 BP; 5 A; 7 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 5.1%; Score 23; DB 1; Length 23;

Best Local Similarity 100.0%; Pred. No. 89;

Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 35 CCATTTTGTCTAACCCCTAACT 57  
|||||  
Db 1 CCATTTTGTCTAACCCCTAACT 23

RESULT 97

ADF93794

ID ADF93794 standard; mRNA; 23 BP.

XX ADF93794;

DT 26-FEB-2004 (first entry)

XX Human TERC mRNA transcript target sequence, SEQ ID 521.

XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; ss.

XX Homo sapiens.

XX WO2003070742-A1.

XX 28-AUG-2003.

XX 11-FEB-2003; 2003WO-US004088.

XX 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 17-JUL-2002; 2002US-0396600P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.



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PR 15-JAN-2003; 2003US-0440129P.
XX (RIBO-) RIBOZYME PHARM INC.
PA Mcswiggen J, Beigelman L;
XX WPI; 2003-689777/65.
XX New short interfering nucleic acid downregulates expression of the
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.
XX Example 3; SEQ ID NO 521; 145pp; English.
XX The invention relates to short interfering nucleic acids (siNA) which
XX downregulate expression of the one or more telomerase genes by RNA
XX interference. The siNAs may or may not comprise ribonucleotides and may
XX be double or single stranded. They further comprise sense and antisense
XX regions, or alternatively are assembled from a sense oligonucleotide and
XX an antisense oligonucleotide. Specifically, the siNAs include short
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
XX can contain deoxyribonucleotides, and can be chemically synthesised,
XX expressed from a vector or enzymatically synthesised. The invention also
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates
XX and/or complexes of siNA; and vectors that express siNA. The siNAs are
XX used for treating cancer, restenosis, infectious diseases (specifically
XX protozoal), transplant rejection, or autoimmune or age-related diseases,
XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,
XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug
XX screening, diagnosis, therapeutic target identification and validation,
XX genetic engineering, pharmacogenomics, studying gene function, and gene
XX mapping (e.g., of single nucleotide polymorphisms). The present sequence
XX represents a human TERC transcript target sequence.
XX Sequence 23 BP; 6 A; 7 C; 3 G; 0 T; 7 U; 0 Other;
XX
XX Query Match 5.1%; Score 23; DB 1; Length 23;
XX Best Local Similarity 69.6%; Pred. No. 89;
XX Matches 16; Conservative 7; Mismatches 0; Indels 0; Gaps 0;
XX
Oy 146 TTCCACCGTTCATTCTAGAGCAA 168
Db :|||||:|||||:
1 UUCACCGGUUUAUUCAGAGCAA 23

RESULT 98
ADP93803
ID ADP93803 standard; mRNA; 23 BP.
AC ADP93803;
XX
XX 26-FEB-2004 (first entry)
XX Human TERC mRNA transcript target sequence, SEQ ID 530.
XX
XX Cytostatic; vasotropic; protozoicide; immunosuppressive; dermatological;
XX neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;
XX antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;
XX RNA interference; short interfering nucleic acid; siNA;
XX short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
XX short hairpin RNA; shRNA; expression modulation; gene therapy;
XX drug screening; diagnosis; therapeutic target identification;
XX pharmacogenomics; gene function analysis; gene mapping; TERC; TERC; ss.
XX
XX Homo sapiens.
XX
XX WO2003070742-A1.
XX
XX 28-AUG-2003.
XX

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PF 11-FEB-2003; 2003WO-US004088.
XX 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 17-JUL-2002; 2002US-0396600P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409233P.
PR 15-JAN-2003; 2003US-0440129P.
XX (RIBO-) RIBOZYME PHARM INC.
XX Mcswiggen J, Beigelman L;
XX WPI; 2003-689777/65.
XX New short interfering nucleic acid downregulates expression of the
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.
XX Disclosure; SEQ ID NO 530; 145pp; English.
XX The invention relates to short interfering nucleic acids (siNA) which
XX downregulate expression of the one or more telomerase genes by RNA
XX interference. The siNAs may or may not comprise ribonucleotides and may
XX be double or single stranded. They further comprise sense and antisense
XX regions, or alternatively are assembled from a sense oligonucleotide and
XX an antisense oligonucleotide. Specifically, the siNAs include short
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
XX can contain deoxyribonucleotides, and can be chemically synthesised,
XX expressed from a vector or enzymatically synthesised. The invention also
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates
XX and/or complexes of siNA; and vectors that express siNA. The siNAs are
XX used to modulate expression of the telomerase genes in cells, tissue
XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
XX transplants for the treatment of a variety of conditions. They may be
XX used for treating cancer, restenosis, infectious diseases (specifically
XX protozoal), transplant rejection, or autoimmune or age-related diseases,
XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,
XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug
XX screening, diagnosis, therapeutic target identification and validation,
XX genetic engineering, pharmacogenomics, studying gene function, and gene
XX mapping (e.g., of single nucleotide polymorphisms). The present sequence
XX represents a human TERC transcript target sequence.
XX Sequence 23 BP; 6 A; 10 C; 6 G; 0 T; 1 U; 0 Other;
XX
XX Query Match 5.1%; Score 23; DB 1; Length 23;
XX Best Local Similarity 95.7%; Pred. No. 89;
XX Matches 22; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
Oy 283 GCACCCACTGCCACCGGAGAG 305
Db |||||:|||||:|||||:
1 GCACCCACUGCCACCGGAGAG 23

RESULT 99
ADP93795
ID ADP93795 standard; mRNA; 23 BP.
XX
XX ADP93795;
XX
XX 26-FEB-2004 (first entry)
XX Human TERC mRNA transcript target sequence, SEQ ID 522.
XX
XX Cytostatic; vasotropic; protozoicide; immunosuppressive; dermatological;
XX neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;
XX antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;
XX RNA interference; short interfering nucleic acid; siNA;
XX short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
XX short hairpin RNA; shRNA; expression modulation; gene therapy;

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RESULT 101  
ID ADF93802 standard; mRNA; 23 BP.  
XX  
XX  
AC ADF93802;  
XX  
DT 26-FEB-2004 (first entry)  
XX  
XX Human TERT mRNA transcript target sequence, SEQ ID 529.  
XX  
XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siRNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
XX  
XX Homo sapiens.  
XX OS  
XX WO2003070742-A1.  
XX PN  
XX 28-AUG-2003.  
XX PD  
XX 11-FEB-2003; 2003WO-US004088.  
XX PF  
XX 20-FEB-2002; 2002US-0358580P.  
XX PR  
XX 11-MAR-2002; 2002US-0363124P.  
XX PR  
XX 06-JUN-2002; 2002US-0386782P.  
XX PR  
XX 17-JUL-2002; 2002US-0396600P.  
XX PR  
XX 29-AUG-2002; 2002US-0406784P.  
XX PR  
XX 05-SEP-2002; 2002US-0408378P.  
XX PR  
XX 09-SEP-2002; 2002US-0409293P.  
XX PR  
XX 15-JAN-2003; 2003US-0440129P.  
XX PF  
XX (RIBO-) RIBOZYME PHARM INC.  
XX PA  
XX Mcswiggen J, Beigelman L;  
XX PI  
XX WPI; 2003-689777/65.  
XX  
XX New short interfering nucleic acid downregulates expression of the  
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
XX Disclosure; SEQ ID NO 529; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the one or more telomerase genes by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA, conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of the telomerase genes in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, infectious diseases (specifically  
CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents a human TERT transcript target sequence.

SQ Sequence 23 BP; 2 A; 11 C; 4 G; 0 T; 6 U; 0 Other;  
Query Match 5.1%; Score 23; DB 1; Length 23;  
Best Local Similarity 73.9%; Pred. No. 89;  
Matches 17; Conservative 6; Mismatches 0; Indels 0; Gaps 0;  
Qy 136 GCCTGCCGCTTCACCGTTTCAT 158  
Db 1 GCCUGCGCCUCCACCGUCAU 23  
RESULT 102  
ADFP3804  
ID ADF93804 standard; mRNA; 23 BP.  
XX  
XX ADF93804;  
XX AC  
XX 26-FEB-2004 (first entry)  
XX DT  
XX Human TERT mRNA transcript target sequence, SEQ ID 531.  
XX DE  
XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
XX  
XX Homo sapiens.  
XX OS  
XX WO2003070742-A1.  
XX PN  
XX 28-AUG-2003.  
XX PD  
XX 11-FEB-2003; 2003WO-US004088.  
XX PF  
XX 20-FEB-2002; 2002US-0358580P.  
XX PR  
XX 11-MAR-2002; 2002US-0363124P.  
XX PR  
XX 06-JUN-2002; 2002US-0386782P.  
XX PR  
XX 17-JUL-2002; 2002US-0396600P.  
XX PR  
XX 29-AUG-2002; 2002US-0406784P.  
XX PR  
XX 05-SEP-2002; 2002US-0408378P.  
XX PR  
XX 09-SEP-2002; 2002US-0409293P.  
XX PR  
XX 15-JAN-2003; 2003US-0440129P.  
XX PF  
XX (RIBO-) RIBOZYME PHARM INC.  
XX PA  
XX Mcswiggen J, Beigelman L;  
XX PI  
XX WPI; 2003-689777/65.  
XX  
XX New short interfering nucleic acid downregulates expression of the  
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
XX Disclosure; SEQ ID NO 531; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the one or more telomerase genes by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA, conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of the telomerase genes in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be

CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents a human TERT transcript target sequence.  
 XX

SQ Sequence 23 BP; 2 A; 8 C; 9 G; 0 T; 4 U; 0 Other;

Query Match 5.1%; Score 23; DB 1; Length 23;  
 Best Local Similarity 82.6%; Pred. No. 89;  
 Matches 19; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 395 GCGCGCGCGGATTCCTGAGTGT 417  
 |||||:|||||:|||||:|||||:  
 Db 1 GCGCGCGCGGAUCCUGAGCUG 23

RESULT 103  
 ADF93801  
 ID ADF93801 standard; mRNA; 23 BP.

AC ADF93801;

DT 26-FEB-2004 (first entry)

DE Human TERT mRNA transcript target sequence, SEQ ID 528.

KW Cytostatic; vasotropic; protozoicide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
 KW RNA interference; short interfering nucleic acid; siNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.

XX Homo sapiens.

PN WO200307042-A1.

XX 28-AUG-2003.

XX 11-FEB-2003; 2003WO-US004088.

XX 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 17-JUL-2002; 2002US-0396600P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Beigelman L;

XX WPI; 2003-689777/65.

XX New short interfering nucleic acid downregulates expression of the  
 PT telomerase gene useful e.g. for treatment and diagnosis of cancer.

XX Disclosure; SEQ ID NO 528; 145pp; English.

XX The invention relates to short interfering nucleic acids (siNA) which  
 CC downregulate expression of the one or more telomerase genes by RNA  
 CC interference. The siNAs may or may not comprise ribonucleotides and may  
 CC be double or single stranded. They further comprise sense and antisense  
 CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siNAs include short

CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesized,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for in vitro or in vivo delivery of siNA; conjugates  
 CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents a human TERT transcript target sequence.  
 XX

SQ Sequence 23 BP; 2 A; 3 C; 14 G; 0 T; 4 U; 0 Other;

Query Match 5.1%; Score 23; DB 1; Length 23;  
 Best Local Similarity 82.6%; Pred. No. 89;  
 Matches 19; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 2 GGTTCGCGAGGCTGGCGCTGGGA 24  
 ||:|||||:|||||:|||||:  
 Db 1 GGUUGCGGAGGUGGCGCUGGGA 23

RESULT 104

ADG29526

ID ADG29526 standard; RNA; 23 BP.

AC ADG29526;

DT 26-FEB-2004 (first entry)

XX hTR siNA-target RNA - SEQ ID 92.

DE double-stranded short interfering nucleic acid; siNA;  
 KW antiarteriosclerotic; neuroprotective; nootropic; antiparkinsonian;  
 KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;  
 KW Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;  
 KW amyotrophic lateral sclerosis; gene therapy; target; ss; hTR.

XX Unidentified.

XX WO2003074654-A2.

XX 12-SEP-2003.

XX 20-FEB-2003; 2003WO-US005028.

XX 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX (SIRN-) SIRNA THERAPEUTICS INC.

XX Mcswiggen J, Beigelman L, Chowkira B, Pavco P, Fosnaugh K;

PI Jamison S, Usman N, Thompson J;

XX WPI; 2003-731676/69.

XX New double-stranded short interfering nucleic acid molecule, useful for  
 PT down-regulating the expression of an endogenous mammalian target gene or  
 PT for treating diseases that respond to modulation of gene expression or  
 PT activity.

```
PS Example 24; SEQ ID NO 92; 593pp; English.
XX
CC The invention relates to a double-stranded short interfering nucleic acid
CC (siNA) molecule that down-regulates expression of an endogenous mammalian
CC target gene comprising one or more chemical modifications and each strand
CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of
CC the invention demonstrates antiarteriosclerotic, neuroprotective,
CC neurotropic, antiparkinsonian and anticonvulsant activities and may be
CC useful for down-regulating the expression of an endogenous mammalian
CC target gene and therefore in the treatment of any disease or condition
CC that responds to modulation of gene expression or activity in a cell,
CC tissue or organism. The disease or condition may include pulmonary
CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,
CC Parkinson's disease, epilepsy, dementia, Huntington's disease or
CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for
CC gene therapy applications. The current sequence is that of the siNA
CC target DNA of the invention.
XX
SQ Sequence 23 BP; 4 A; 5 C; 9 G; 0 T; 5 U; 0 Other;
Query Match 5.1%; Score 23; DB 1; Length 23;
Best Local Similarity 78.3%; Pred. No. 89;
Matches 18; Conservative 5; Mismatches 0; Indels 0; Gaps 0;
QY 298 GCGAAGAGTGGGCTCTCTCAGC 320
DB 1 GCGAAGAGUGGGCUCUGCAGC 23
RESULT 105
ADG29519
ID ADG29519 standard; RNA; 23 BP.
XX
AC ADG29519;
XX
DT 26-FEB-2004 (first entry)
XX
DE HTR siNA-target RNA - SEQ ID 85.
XX
KW double-stranded short interfering nucleic acid; siNA;
KW antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;
KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;
KW Alzheimer's; Parkinson's; epilepsy; dementia; Huntington's;
KW amyotrophic lateral sclerosis; gene therapy; target; ss; htr.
XX
OS Unidentified.
XX
PN WO2003074654-A2.
XX
PD 12-SEP-2003.
XX
PF 20-FEB-2003; 2003WO-US005028.
XX
PR 20-FEB-2002; 2002US-0359580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (SIRN-) SIRNA THERAPEUTICS INC.
XX
XX
XX Mcswiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;
PI Jamison S, Usman N, Thompson J;
XX
XX WPI; 2003-731676/69.
XX
XX New double-stranded short interfering nucleic acid molecule, useful for
XX PT down-regulating the expression of an endogenous mammalian target gene or
XX PT for treating diseases that respond to modulation of gene expression or
XX PT activity.
XX
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PS Example 24; SEQ ID NO 85; 593pp; English.
XX
CC The invention relates to a double-stranded short interfering nucleic acid
CC (siNA) molecule that down-regulates expression of an endogenous mammalian
CC target gene comprising one or more chemical modifications and each strand
CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of
CC the invention demonstrates antiarteriosclerotic, neuroprotective,
CC neurotropic, antiparkinsonian and anticonvulsant activities and may be
CC useful for down-regulating the expression of an endogenous mammalian
CC target gene and therefore in the treatment of any disease or condition
CC that responds to modulation of gene expression or activity in a cell,
CC tissue or organism. The disease or condition may include pulmonary
CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,
CC Parkinson's disease, epilepsy, dementia, Huntington's disease or
CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for
CC gene therapy applications. The current sequence is that of the siNA
CC target DNA of the invention.
XX
SQ Sequence 23 BP; 2 A; 3 C; 14 G; 0 T; 4 U; 0 Other;
Query Match 5.1%; Score 23; DB 1; Length 23;
Best Local Similarity 82.6%; Pred. No. 89;
Matches 19; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
QY 2 GGTTCGCGAGGCTGGCGCTCGGA 24
DB 1 GGUUGCGGAGGGUGGCGCUGGGA 23
RESULT 106
ADG29525
ID ADG29525 standard; RNA; 23 BP.
XX
AC ADG29525;
XX
DT 26-FEB-2004 (first entry)
XX
DE HTR siNA-target RNA - SEQ ID 91.
XX
KW double-stranded short interfering nucleic acid; siNA;
KW antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;
KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;
KW Alzheimer's; Parkinson's; epilepsy; dementia; Huntington's;
KW amyotrophic lateral sclerosis; gene therapy; target; ss; htr.
XX
OS Unidentified.
XX
PN WO2003074654-A2.
XX
PD 12-SEP-2003.
XX
PF 20-FEB-2003; 2003WO-US005028.
XX
PR 20-FEB-2002; 2002US-0359580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (SIRN-) SIRNA THERAPEUTICS INC.
XX
XX
XX Mcswiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;
PI Jamison S, Usman N, Thompson J;
XX
XX WPI; 2003-731676/69.
XX
XX New double-stranded short interfering nucleic acid molecule, useful for
XX PT down-regulating the expression of an endogenous mammalian target gene or
XX PT for treating diseases that respond to modulation of gene expression or
XX PT activity.
XX
```

PS	Example 24; SEQ ID NO 91; 593pp; English.	PS	Example 24; SEQ ID NO 87; 593pp; English.
XX		XX	
CC	The invention relates to a double-stranded short interfering nucleic acid	CC	The invention relates to a double-stranded short interfering nucleic acid
CC	(siNA) molecule that down-regulates expression of an endogenous mammalian	CC	(siNA) molecule that down-regulates expression of an endogenous mammalian
CC	target gene comprising one or more chemical modifications and each strand	CC	target gene comprising one or more chemical modifications and each strand
CC	of the double-stranded siNA comprises about 21 nucleotides. The siNA of	CC	of the double-stranded siNA comprises about 21 nucleotides. The siNA of
CC	the invention demonstrates antiarteriosclerotic, neuroprotective,	CC	the invention demonstrates antiarteriosclerotic, neuroprotective,
CC	neurotropic, antiparkinsonian and anticonvulsant activities and may be	CC	neurotropic, antiparkinsonian and anticonvulsant activities and may be
CC	useful for down-regulating the expression of an endogenous mammalian	CC	useful for down-regulating the expression of an endogenous mammalian
CC	target gene and therefore in the treatment of any disease or condition	CC	target gene and therefore in the treatment of any disease or condition
CC	that responds to modulation of gene expression or activity in a cell,	CC	that responds to modulation of gene expression or activity in a cell,
CC	tissue or organism. The disease or condition may include pulmonary	CC	tissue or organism. The disease or condition may include pulmonary
CC	diseases such as restenosis, atherosclerosis, Alzheimer's disease,	CC	diseases such as restenosis, atherosclerosis, Alzheimer's disease,
CC	Parkinson's disease, epilepsy, dementia, huntington's disease or	CC	Parkinson's disease, epilepsy, dementia, huntington's disease or
CC	anyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for	CC	anyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for
CC	gene therapy applications. The current sequence is that of the siNA	CC	gene therapy applications. The current sequence is that of the siNA
CC	target DNA of the invention.	CC	target DNA of the invention.
XX		XX	
SQ	Sequence 23 BP; 6 A; 7 C; 3 G; 0 T; 7 U; 0 Other;	SQ	Sequence 23 BP; 6 A; 10 C; 6 G; 0 T; 1 U; 0 Other;
	Query Match 5.1%; Score 23; DB 1; Length 23;		Query Match 5.1%; Score 23; DB 1; Length 23;
	Best Local Similarity 69.6%; Pred. No. 89;		Best Local Similarity 95.7%; Pred. No. 89;
	Matches 16; Conservative 7; Mismatches 0; Indels 0; Gaps 0;		Matches 22; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY	146 TTCCACCGTTCATTCTAGAGCAA 168	QY	283 GCACCCACTGCCACCGCGAAGAG 305
DB	:     :     :     :     :	DB	:     :     :
	1 UUCCACCGUUAUCUAGAGCAA 23		1 GCACCCACUGCCACCGCGAAGAG 23
RESULT 107		RESULT 108	
ADG29521		ADG29524	
ID	ADG29521 standard; RNA; 23 BP.	ID	ADG29524 standard; RNA; 23 BP.
XX		XX	
AC	ADG29521;	AC	ADG29524;
XX		XX	
DT	26-FEB-2004 (first entry)	DT	26-FEB-2004 (first entry)
XX		XX	
DE	hTR siNA-target RNA - SEQ ID 87.	DE	hTR siNA-target RNA - SEQ ID 90.
XX		XX	
KW	double-stranded short interfering nucleic acid; siNA;	KW	double-stranded short interfering nucleic acid; siNA;
KW	antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;	KW	antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;
KW	anticonvulsant; pulmonary disease; restenosis; atherosclerosis;	KW	anticonvulsant; pulmonary disease; restenosis; atherosclerosis;
KW	Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;	KW	Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;
KW	anyotrophic lateral sclerosis; gene therapy; target; ss; hTR.	KW	anyotrophic lateral sclerosis; gene therapy; target; ss; hTR.
XX		XX	
OS	Unidentified.	OS	Unidentified.
XX		XX	
FN	WO2003074654-A2.	FN	WO2003074654-A2.
XX		XX	
PD	12-SEP-2003.	PD	12-SEP-2003.
XX		XX	
PF	20-FEB-2003; 2003WO-US005028.	PF	20-FEB-2003; 2003WO-US005028.
XX		XX	
PR	20-FEB-2002; 2002US-0358580P.	PR	20-FEB-2002; 2002US-0358580P.
PR	11-MAR-2002; 2002US-0363124P.	PR	11-MAR-2002; 2002US-0363124P.
PR	06-JUN-2002; 2002US-0386782P.	PR	06-JUN-2002; 2002US-0386782P.
PR	29-AUG-2002; 2002US-0406784P.	PR	29-AUG-2002; 2002US-0406784P.
PR	05-SEP-2002; 2002US-0408378P.	PR	05-SEP-2002; 2002US-0408378P.
PR	09-SEP-2002; 2002US-0409293P.	PR	09-SEP-2002; 2002US-0409293P.
PR	15-JAN-2003; 2003US-0440129P.	PR	15-JAN-2003; 2003US-0440129P.
XX		XX	
PA	(SIRN-) SIRNA THERAPEUTICS INC.	PA	(SIRN-) SIRNA THERAPEUTICS INC.
XX		XX	
PI	Mcswiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;	PI	Mcswiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;
PI	Jamison S, Usman N, Thompson J;	PI	Jamison S, Usman N, Thompson J;
XX		XX	
DR	WPI; 2003-731676/69.	DR	WPI; 2003-731676/69.
XX		XX	
PT	New double-stranded short interfering nucleic acid molecule, useful for	PT	New double-stranded short interfering nucleic acid molecule, useful for
PT	down-regulating the expression of an endogenous mammalian target gene or	PT	down-regulating the expression of an endogenous mammalian target gene or
PT	for treating diseases that respond to modulation of gene expression or	PT	for treating diseases that respond to modulation of gene expression or
PT	activity.	PT	activity.
XX		XX	

PS Example 24; SEQ ID NO 90; 593pp; English.

XX The invention relates to a double-stranded short interfering nucleic acid  
 CC (siNA) molecule that down-regulates expression of an endogenous mammalian  
 CC target gene comprising one or more chemical modifications and each strand  
 CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of  
 CC the invention demonstrates antiarteriosclerotic, neuroprotective,  
 CC neurotropic, antiparkinsonian and anticonvulsant activities and may be  
 CC useful for down-regulating the expression of an endogenous mammalian  
 CC target gene and therefore in the treatment of any disease or condition  
 CC that responds to modulation of gene expression or activity in a cell,  
 CC tissue or organism. The disease or condition may include pulmonary  
 CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,  
 CC Parkinson's disease, epilepsy, dementia, Huntington's disease or  
 CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for  
 CC gene therapy applications. The current sequence is that of the siNA  
 CC target DNA of the invention.

XX SQ Sequence 23 BP; 4 A; 9 C; 3 G; 0 T; 7 U; 0 Other;

Query Match 5.1%; Score 23; DB 1; Length 23;  
 Best Local Similarity 69.6%; Pred. No. 89;  
 Matches 16; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

Qy 144 CCTCCACCGCTTCATTCAGAGC 166  
 |||:|||||:|||||:|||||  
 Db 1 CCUCCACCGUUCUUCUAGAGC 23

#### RESULT 109

ADG29520

ID ADG29520 standard; RNA; 23 BP.

XX AC ADG29520;

XX DT 26-FEB-2004 (first entry)

XX DE hTR siNA-target RNA - SEQ ID 86.

XX double-stranded short interfering nucleic acid; siNA;  
 KW antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;  
 KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;  
 KW Alzheimer's; Parkinson's; epilepsy; dementia; Huntington's;  
 KW amyotrophic lateral sclerosis; gene therapy; target; ss; hTR.

XX OS Unidentified.

XX PN W02003074654-A2.

XX PD 12-SEP-2003.

XX PF 20-FEB-2003; 2003WO-US005028.

XX PR 20-FEB-2002; 2002US-0358580P.

XX PR 11-MAR-2002; 2002US-0363124P.

XX PR 06-JUN-2002; 2002US-0386782P.

XX PR 29-AUG-2002; 2002US-0406784P.

XX PR 05-SEP-2002; 2002US-0408378P.

XX PR 09-SEP-2002; 2002US-0409293P.

XX PR 15-JAN-2003; 2003US-0440129P.

XX (SIRN-) SIRNA THERAPEUTICS INC.

XX PA Mcawiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;

XX PI Jamison S, Usman N, Thompson J;

XX DR WPI; 2003-731676/69.

XX New double-stranded short interfering nucleic acid molecule, useful for  
 PT down-regulating the expression of an endogenous mammalian target gene or  
 PT for treating diseases that respond to modulation of gene expression or  
 PT activity.

XX

PS Example 24; SEQ ID NO 86; 593pp; English.

XX The invention relates to a double-stranded short interfering nucleic acid  
 CC (siNA) molecule that down-regulates expression of an endogenous mammalian  
 CC target gene comprising one or more chemical modifications and each strand  
 CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of  
 CC the invention demonstrates antiarteriosclerotic, neuroprotective,  
 CC neurotropic, antiparkinsonian and anticonvulsant activities and may be  
 CC useful for down-regulating the expression of an endogenous mammalian  
 CC target gene and therefore in the treatment of any disease or condition  
 CC that responds to modulation of gene expression or activity in a cell,  
 CC tissue or organism. The disease or condition may include pulmonary  
 CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,  
 CC Parkinson's disease, epilepsy, dementia, Huntington's disease or  
 CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for  
 CC gene therapy applications. The current sequence is that of the siNA  
 CC target DNA of the invention.

XX SQ Sequence 23 BP; 2 A; 11 C; 4 G; 0 T; 6 U; 0 Other;

Query Match 5.1%; Score 23; DB 1; Length 23;  
 Best Local Similarity 73.9%; Pred. No. 89;  
 Matches 17; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

Qy 136 GCCTGCCGCTTCACCGTTCAT 158  
 |||:|||||:|||||:|||||  
 Db 1 GCCUGCGCCUCCACCGUUCAU 23

#### RESULT 110

ADG29522

ID ADG29522 standard; RNA; 23 BP.

XX AC ADG29522;

XX DT 26-FEB-2004 (first entry)

XX DE hTR siNA-target RNA - SEQ ID 88.

XX double-stranded short interfering nucleic acid; siNA;  
 KW antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;  
 KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;  
 KW Alzheimer's; Parkinson's; epilepsy; dementia; Huntington's;  
 KW amyotrophic lateral sclerosis; gene therapy; target; ss; hTR.

XX OS Unidentified.

XX PN W02003074654-A2.

XX PD 12-SEP-2003.

XX PF 20-FEB-2003; 2003WO-US005028.

XX PR 20-FEB-2002; 2002US-0358580P.

XX PR 11-MAR-2002; 2002US-0363124P.

XX PR 06-JUN-2002; 2002US-0386782P.

XX PR 29-AUG-2002; 2002US-0406784P.

XX PR 05-SEP-2002; 2002US-0408378P.

XX PR 09-SEP-2002; 2002US-0409293P.

XX PR 15-JAN-2003; 2003US-0440129P.

XX (SIRN-) SIRNA THERAPEUTICS INC.

XX PA Mcawiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;

XX PI Jamison S, Usman N, Thompson J;

XX DR WPI; 2003-731676/69.

XX New double-stranded short interfering nucleic acid molecule, useful for  
 PT down-regulating the expression of an endogenous mammalian target gene or  
 PT for treating diseases that respond to modulation of gene expression or  
 PT activity.

XX

PS Example 24; SEQ ID NO 88; 593pp; English.

XX The invention relates to a double-stranded short interfering nucleic acid

CC (siNA) molecule that down-regulates expression of an endogenous mammalian

CC target gene comprising one or more chemical modifications and each strand

CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of

CC the invention demonstrates antiarteriosclerotic, neuroprotective,

CC neurotropic, antiparkinsonian and anticonvulsant activities and may be

CC useful for down-regulating the expression of an endogenous mammalian

CC target gene and therefore in the treatment of any disease or condition

CC that responds to modulation of gene expression or activity in a cell,

CC tissue or organism. The disease or condition may include pulmonary

CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,

CC Parkinson's disease, epilepsy, dementia, Huntington's disease or

CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for

CC gene therapy applications. The current sequence is that of the siNA

CC target DNA of the invention.

XX

SQ Sequence 23 BP; 2 A; 8 C; 9 G; 0 T; 4 U; 0 Other;

Query Match 5.1%; Score 23; DB 1; Length 23;

Best Local Similarity 82.6%; Pred. No. 89;

Matches 19; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 395 GCGGCGCGGATTCCTGAGCTG 417

DB 1 GCGGCGCGGAUCCUGAGCUG 23

RESULT 111

ID ADP27908/c

XX ADP27908 standard; DNA; 23 BP.

XX

AC ADP27908;

XX

DT 26-AUG-2004 (first entry)

XX

DE PCR primer to amplify a human cancer prognostic marker DNA SeqID 345.

XX

XX human; primer; PCR; prognostic marker; EGFR;

KW epidermal growth factor receptor; cancer; gene expression profiling;

KW microarray; head and neck cancer; colon cancer; metastatic spread;

KW neoplastic disease; ss.

XX

OS Homo sapiens.

XX

PN WO2004046386-A1.

XX

PD 03-JUN-2004.

XX

XX 14-NOV-2003; 2003WO-US036777.

PF

XX 15-NOV-2002; 2002US-0427090P.

PR

XX (GENO-) GENOMIC HEALTH INC.

PA (VALL-) VALL HEBRON UNIV HOSPITAL.

XX

PI Baker JB, Cronin MT, Shak S, Baselga J;

XX

DR WPI; 2004-420643/39.

XX

XX Prognosing a patient with EGFR-expressing colon cancer comprises

PT subjecting a sample comprising EGFR-expressing cancer cells to

PT quantitative analysis of the expression level of the RNA transcript of at

PT least one gene e.g., CD44v3.

XX

XX Claim 54; SEQ ID NO 345; 113pp; English.

PS

XX This invention relates to a novel method concerning prognostic markers

CC associated with EGFR (epidermal growth factor receptor) positive cancer.

CC Specifically, it refers to a gene expression profiling method that can

CC provide a prediction as to whether a patient is likely to respond well to

CC treatment with an EGFR inhibitor. The present invention describes the

CC quantitative analysis of the expression level of the RNA transcript of at

CC least one gene selected from the group of CD44v3, CD44v6, DR3, CD91,

CC KRT17, LAMC2 or their products thereof. It further provides a cDNA

CC microarray containing named genes that represent prognostic transcripts

CC which are useful for determining whether a patient diagnosed with an EGFR

CC -expressing head or neck cancer or colon cancer exhibits elevated or

CC decreased expression levels of these genes compared to normal. As such,

CC these methods are also useful for prognosing or predicting the likelihood

CC of cancer-attributable death or progression, including recurrence and

CC metastatic spread of a neoplastic disease, as well as drug resistance.

CC This oligonucleotide sequence is a PCR primer used to amplify a human PCR

CC amplicon DNA sequence used as a prognostic cancer marker, given in an

CC exemplification of the invention.

XX

SQ Sequence 23 BP; 6 A; 9 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 5.1%; Score 23; DB 1; Length 23;

Best Local Similarity 100.0%; Pred. No. 89;

Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 404 GATTCCTGAGCTGTGGGACGTG 426

DB 23 GATTCCTGAGCTGTGGGACGTG 1

RESULT 112

AAZ07300

ID AAZ07300 standard; DNA; 25 BP.

XX

AC AAZ07300;

XX

DT 22-OCT-1999 (first entry)

XX

DE Human telomerase RNA gene (hTR) promoter specific primer h11c.

XX

XX Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;

KW gene therapy; thymidine kinase gene; anticancer therapy; human;

KW mutagenesis; PCR primer; ss.

XX

OS Synthetic.

OS Homo sapiens.

XX

XX WO9938964-A2.

PN

XX 05-AUG-1999.

PD

XX 29-JAN-1999; 99WO-GB000308.

PF

XX 29-JAN-1998; 98GB-00001902.

PR

XX (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.

XX

XX Keith WN;

PI

XX WPI; 1999-479183/40.

DR

XX Mouse and human telomerase RNA gene promoters, useful for tumor specific

PT gene therapy.

PT

XX Disclosure; Fig 12; 109pp; English.

PS

XX The invention relates to promoter regions from mouse and human telomerase

CC RNA (TR) component genes. The TR gene promoter can be linked to a

CC heterologous gene, especially a gene encoding a cytotoxin, for therapy of

CC cancer, especially neoplasias. The telomerase is necessary for the

CC unrestricted proliferative capacity of many human cancers. Mutation or

CC dysregulation of the telomerase repression pathway may cause reactivation

CC or upregulation of telomerase expression in cancer. Substances,

CC identified in the methods, can be used to block transcription from the TR

CC gene promoter through interaction of the 5' regulatory sequences. These

CC substances, e.g. antisense oligonucleotides, transcription factors,

CC peptide nucleic acids and factors that disrupt signal transduction, are

CC useful for cancer therapy. In particular, gene therapy vectors



CC (especially pGT62-codAupp) comprising the promoter and a viral thymidine  
 CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that  
 CC neoplasia can be controlled or treated. Direct down-regulation of  
 CC telomerase RNA gene through manipulation of transcription factors may be  
 CC effective anticancer therapy and the cloning of the hTR gene promoter  
 CC allows the analysis of therapeutic molecules which modulate hTR promoter  
 CC activity. Sequences AA207696-321 represent PCR primers used in cloning  
 CC and mutagenesis of human TR gene (hTR) promoter region  
 XX

SQ Sequence 25 BP; 1 A; 5 C; 15 G; 4 T; 0 U; 0 Other;  
 Query Match 5.1%; Score 23; DB 1; Length 25;  
 Best Local Similarity 100.0%; Pred. No. 1e+02;  
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GGGTTGCGAGGGTGGCGCTGGG 23  
 Db 3 GGGTTGCGAGGGTGGCGCTGGG 25

RESULT 113  
 AAT11045  
 ID AAT11045 standard; DNA; 27 BP.  
 XX  
 AC AAT11045;  
 XX  
 DT 02-JUL-1996 (first entry)  
 XX  
 DE Primer used for producing telomerase probe.  
 XX  
 KW Telomerase; mammal; antisense; triplex forming oligonucleotide; plasmid;  
 KW probe; primer; ribozyme; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9601614-A2.  
 XX  
 PD 25-JAN-1996.  
 XX  
 PF 07-JUL-1995; 95WO-US008620.  
 XX  
 PR 07-JUL-1994; 94US-00272102.  
 PR 27-OCT-1994; 94US-00330123.  
 PR 13-FEB-1995; 95US-00387524.  
 PR 07-JUN-1995; 95US-00485778.  
 XX  
 PA (COLD-) COLD SPRING HARBOR LAB.  
 PA (GERO-) GERON CORP.  
 XX  
 PI Andrews WH, Avillon AA, Feng J, Funk W, Greider C, Marhuenda MA;  
 PI Villeponteau B;  
 XX  
 DR WPI; 1996-097428/10.  
 XX  
 PT RNA components of (non)human mammalian telomerase(s) - useful in studying  
 PT cell senescence and immortalisation.  
 XX  
 PS Example 10; Page 55; 85pp; English.  
 XX  
 CC The RNA components of (non) human mammalian telomerase(s) especially from  
 CC mouse, rat and chinese hamster are all claimed. Antisense  
 CC oligonucleotides can be used to block the activity of the telomerase;  
 CC probes and primers can be used in detection; vectors and host cells  
 CC transformed with the isolated telomerase genes can be used for production  
 CC of telomerase; RNA and DNA ribozymes and triplex forming  
 CC oligonucleotides directed against the telomerase genes can be used  
 CC therapeutically as can plasmids. A mouse which lacks the telomerase gene  
 CC the role it plays in immortalisation. The antisense oligonucleotide is  
 CC synthesised as a 2-O-methyl RNA oligonucleotide and is more resistant to  
 CC hydrolysis than unmodified RNA oligonucleotides (See AAT11032-35)  
 XX

SQ Sequence 22 BP; 3 A; 6 C; 6 G; 0 T; 7 U; 0 Other;  
 Query Match 4.9%; Score 22; DB 1; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 1e+02;  
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGGCG 67  
 Db 22 CTAACCCCTAACTGAGAGGGCG 1

RESULT 114  
 AAT11033/c  
 ID AAT11033 standard; DNA; 22 BP.  
 XX  
 AC AAT11033;  
 XX  
 DT 02-JUL-1996 (first entry)  
 XX  
 DE Antisense oligonucleotide (P3) inhibiting telomerase activity.  
 XX  
 KW Telomerase; mammal; antisense; triplex forming oligonucleotide; plasmid;  
 KW probe; primer; ribozyme; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9601614-A2.  
 XX  
 PD 25-JAN-1996.  
 XX  
 PF 07-JUL-1995; 95WO-US008620.  
 XX  
 PR 07-JUL-1994; 94US-00272102.  
 PR 27-OCT-1994; 94US-00330123.  
 PR 13-FEB-1995; 95US-00387524.  
 PR 07-JUN-1995; 95US-00485778.  
 XX  
 PA (COLD-) COLD SPRING HARBOR LAB.  
 PA (GERO-) GERON CORP.  
 XX  
 PI Andrews WH, Avillon AA, Feng J, Funk W, Greider C, Marhuenda MA;  
 PI Villeponteau B;  
 XX  
 DR WPI; 1996-097428/10.  
 XX  
 PT RNA components of (non)human mammalian telomerase(s) - useful in studying  
 PT cell senescence and immortalisation.  
 XX  
 PS Disclosure; Page 23; 85pp; English.  
 XX  
 CC The RNA components of (non) human mammalian telomerase(s) especially from  
 CC mouse, rat and chinese hamster are all claimed. Antisense  
 CC oligonucleotides can be used to block the activity of the telomerase;  
 CC probes and primers can be used in detection; vectors and host cells  
 CC transformed with the isolated telomerase genes can be used for production  
 CC of telomerase; RNA and DNA ribozymes and triplex forming  
 CC oligonucleotides directed against the telomerase genes can be used  
 CC therapeutically as can plasmids. A mouse which lacks the telomerase gene  
 CC the role it plays in immortalisation. The antisense oligonucleotide is  
 CC synthesised as a 2-O-methyl RNA oligonucleotide and is more resistant to  
 CC hydrolysis than unmodified RNA oligonucleotides (See AAT11032-35)  
 XX

SQ Sequence 22 BP; 3 A; 6 C; 6 G; 0 T; 7 U; 0 Other;  
 Query Match 4.9%; Score 22; DB 1; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 1e+02;  
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGGCG 67  
 Db 22 CTAACCCCTAACTGAGAGGGCG 1

XX

```
RESULT 115
AAT11034/c
ID AAT11034 standard; DNA; 22 BP.
XX
XX
AC AAT11034;
XX
XX 02-JUL-1996 (first entry)
XX
XX Antisense oligonucleotide (TA3) inhibiting telomerase activity.
DE
XX Telomerase; mammal; antisense; triplex forming oligonucleotide; plasmid;
KW probe; primer; ribozyme; ss.
XX
XX Synthetic.
XX
XX WO9601614-A2.
XX
XX 25-JAN-1996.
XX
XX 07-JUL-1995; 95WO-US008620.
XX
XX 07-JUL-1994; 94US-00272102.
XX 27-OCT-1994; 94US-00330123.
XX 13-FEB-1995; 95US-00387524.
XX 07-JUN-1995; 95US-00485778.
XX
XX (COLD-) COLD SPRING HARBOR LAB.
PA (GERO-) GERON CORP.
XX
XX Andrews WH, Avillon AA, Feng J, Funk W, Greider C, Marhuenda MA,
PI Villeponteau B;
XX
XX WPI; 1996-097428/10.
DR
XX
XX RNA components of (non)human mammalian telomerase(s) - useful in studying
PT cell senescence and immortalisation.
XX
XX Disclosure; Page 23; 85pp; English.
XX
XX The RNA components of (non) human mammalian telomerase(s) especially from
CC mouse, rat and chinese hamster are all claimed. Antisense
CC oligonucleotides can be used to block the activity of the telomerase;
CC probes and primers can be used in detection; vectors and host cells
CC transformed with the isolated telomerase genes can be used for production
CC of telomerases; RNA and DNA ribozymes and triplex forming
CC oligonucleotides directed against the telomerase genes can be used
CC therapeutically as can plasmids. A mouse which lacks the telomerase gene
CC (also claimed) can be used for study of telomere regulation in vivo, and
CC the role it plays in immortalisation. The antisense oligonucleotide is
CC synthesised as a 2-O-methyl RNA oligonucleotide and is more resistant to
CC hydrolysis than unmodified RNA oligonucleotides (See AAT11032-35)
XX
XX Sequence 22 BP; 2 A; 9 C; 5 G; 0 T; 6 U; 0 Other;
SQ
Query Match 4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 54 AACTGAGAGGGCGTAGCGCC 75
DB 22 AACTGAGAGGGCGTAGCGCC 1
|||||
RESULT 117
AAT10287/c
ID AAT10287 standard; DNA; 22 BP.
XX
XX AAT10287;
AC
XX 09-SEP-1996 (first entry)
DT
XX RNA component of mammalian telomerase antisense oligonucleotide P3.
DE
XX
XX RNA component; mammalian; telomerase; antisense oligonucleotide;
KW triple helix; inhibition; neoplastic; cells; activity; ss.
XX
XX Synthetic.
XX
XX WO9601835-A1.
XX
XX 25-JAN-1996.
XX
XX 06-JUL-1995; 95WO-US008530.
XX
XX 07-JUL-1994; 94US-00272102.
XX 27-OCT-1994; 94US-00330123.
XX 07-JUN-1995; 95US-00472802.
XX 07-JUN-1995; 95US-00482115.
XX
XX (GERO-) GERON CORP.
PA
XX Villeponteau B, Feng J, Funk W, Andrews WH,
PI WPI; 1996-097581/10.
DR
XX
XX RNA component of mammalian telomerase, esp. human - useful in identifying
PT e.g. candidate telomerase-modulating agents.
XX
XX Disclosure; Page 38; 114pp; English.
XX
XX The present sequence is a RNA component of mammalian telomerase,
CC antisense oligonucleotide, which can be used, along with triple helix
CC forming sequences, to inhibit telomerase activity in cells, esp.
CC neoplastic cells
XX
XX Sequence 22 BP; 2 A; 9 C; 5 G; 6 T; 0 U; 0 Other;
SQ
Query Match 4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 54 AACTGAGAGGGCGTAGCGCC 75
DB 22 AACTGAGAGGGCGTAGCGCC 1
|||||
RESULT 116
AAT10288/c
ID AAT10288 standard; DNA; 22 BP.
XX
XX AAT10288;
AC
XX 09-SEP-1996 (first entry)
DT
XX RNA component of mammalian telomerase antisense oligonucleotide TA3.
DE
```

XX WPI; 1996-097581/10.  
 XX RNA component of mammalian telomerase, esp. human - useful in identifying  
 XX e.g. candidate telomerase-modulating agents.  
 XX Disclosure; Page 38; 114pp; English.  
 XX The present sequence is a RNA component of mammalian telomerase,  
 XX antisense oligonucleotide, which can be used, along with triple helix  
 XX forming sequences, to inhibit telomerase activity in cells, esp.  
 XX neoplastic cells  
 XX Sequence 22 BP; 3 A; 6 C; 6 G; 7 T; 0 U; 0 Other;  
 SQ Query Match 4.9%; Score 22; DB 1; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 1e+02;  
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 46 CTAACCCCTAACTGAGAGGGG 67  
 Db 22 CTAACCCCTAACTGAGAGGGG 1  
 RESULT 118  
 AAT10308/c  
 ID AAT10308 standard; DNA; 22 BP.  
 XX  
 AC AAT10308;  
 XX  
 DT 10-SEP-1996 (first entry)  
 XX  
 DE RNA component of human telomerase PRINS return primer.  
 XX  
 KW RNA component; human; telomerase; return primer; PRINS;  
 KW recombinant production; synthesis; mutant; detection; mammalian;  
 KW identification; modulating agent; neoplastic condition;  
 KW transcriptional regulatory sequence; gene therapy; disease;  
 KW primed in situ labelling; ss.  
 XX  
 OS Synthetic.  
 XX  
 XX WO9601835-A1.  
 XX  
 PD 25-JAN-1996.  
 XX  
 XX 06-JUL-1995; 95WO-US008530.  
 XX  
 PR 07-JUL-1994; 94US-00272102.  
 PR 27-OCT-1994; 94US-00330123.  
 PR 07-JUN-1995; 95US-00472802.  
 PR 07-JUN-1995; 95US-00482115.  
 XX  
 XX (GERO-) GERON CORP.  
 XX  
 XX Villeponteau B, Feng J, Funk W, Andrews WH;  
 XX WPI; 1996-097581/10.  
 XX  
 XX RNA component of mammalian telomerase, esp. human - useful in identifying  
 XX e.g. candidate telomerase-modulating agents.  
 XX Example 13; Page 90; 114pp; English.  
 XX  
 XX The present sequence, a return primer for the RNA component of human  
 XX telomerase (RCHT), was used in a primed in situ labelling (PRINS)  
 XX procedure. The RCHT can be used in the recombinant prodn. of an active  
 XX telomerase mol., capable of adding sequences to chromosomal DNA  
 XX telomeres, and in the synthesis of mutant sequences for the detection of  
 XX mutant mammalian telomerase RNA component polynucleotides. The RCHT may  
 XX also be used in the identification of telomerase modulating agents, and  
 XX in the detection of telomerase related, or neoplastic conditions in a  
 XX patient. Polynucleotides of at least 25 consecutive nucleotides

CC identical, or complementary to the RCHT sequence linked to heterologous  
 CC transcriptional regulatory sequences, can be used for the gene therapy of  
 CC human diseases  
 XX  
 SQ Sequence 22 BP; 5 A; 5 C; 12 G; 0 T; 0 U; 0 Other;  
 Query Match 4.9%; Score 22; DB 1; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 1e+02;  
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 183 CTGCTGGCCCGTTCGCCCTCC 204  
 Db 22 CTGCTGGCCCGTTCGCCCTCC 1  
 RESULT 119  
 AAT58812/c  
 ID AAT58812 standard; DNA; 22 BP.  
 XX  
 AC AAT58812;  
 XX  
 DT 20-NOV-1997 (first entry)  
 XX  
 DE Human telomerase PCR 3'-primer hal88.  
 XX  
 KW Cancer; eukaryotic parasite; hTR; vertebrate telomerase; yeast; protozoa;  
 KW tumour; antibody; polymerase chain reaction; ss.  
 XX  
 OS Synthetic.  
 XX  
 XX WO9640868-A1.  
 XX  
 PD 19-DEC-1996.  
 XX  
 XX 06-JUN-1996; 96WO-US009517.  
 XX  
 PR 07-JUN-1995; 95US-00478352.  
 XX  
 XX (COLD-) COLD SPRING HARBOR LAB.  
 XX  
 XX Greider C, Autexier C;  
 XX WPI; 1997-099928/09.  
 XX  
 XX DNA encoding essential RNA components of human telomerase - also  
 XX truncated or recombinant telomerase, useful for diagnosis and treatment  
 XX of cancer and infection by eukaryotic parasites.  
 XX Example 5; Page 32; 48pp; English.  
 XX  
 XX The present sequence represents PCR 3'-primer hal88 used for amplifying  
 XX the human telomerase (hTR). The RNA and DNA can be used in hybridisation  
 XX assays to detect or quantify telomerase activity in cells, tissue or  
 XX fluid samples, e.g. for diagnosis of eukaryotic parasites (yeast and  
 XX protozoa) or tumours. It is also useful as primers for amplification  
 XX assays. The truncated or recombinant vertebrate telomerase is used  
 XX therapeutically to increase telomerase activity (also as reagents in the  
 XX screening assay) while the RNA or other inhibitors such as antisense  
 XX molecules, are used to reduce such activity. Typical applications are  
 XX initiation/restoration of activity to cause senescence or to prevent  
 XX immortalisation of cells in tumours or parasites. The DNA is also used to  
 XX produce recombinant telomerase, which can then be used conventionally to  
 XX raise antibodies for diagnostic detection of telomerase. Detecting  
 XX telomerase allows early diagnosis of tumour or infection, before clinical  
 XX signs manifest. Telomerase inhibitors directed against e.g. Trypanosoma  
 XX should cause fewer side effects than drugs currently used to treat such  
 XX infections. The DNA encodes those parts of hTR RNA essential for activity  
 XX but are significantly shorter than the endogenous RNA component  
 XX  
 SQ Sequence 22 BP; 3 A; 4 C; 4 G; 11 T; 0 U; 0 Other;  
 Query Match 4.9%; Score 22; DB 1; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 1e+02;

Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 163 GAGCAACAAATAATGTCAGCT 184  
ID AAV63646 standard; DNA; 22 BP.  
XX AC AAV63646;  
XX 15-FEB-1999 (first entry)  
XX Antisense oligonucleotide P3 for human telomerase RNA component.  
DE Human; telomerase RNA component; anticancer therapy; purification; assay;  
KW vaccine; cancer; antisense oligonucleotide; ss.  
XX Synthetic.  
OS Homo sapiens.  
XX Key modified\_base 1 Location/Qualifiers  
FT /\*tag= a  
FT /note= "biotinylated"  
XX W09845450-A1.  
XX 15-OCT-1998.  
XX 04-APR-1997; 97WO-US006012.  
XX 04-APR-1997; 97WO-US006012.  
XX (GERO-) GERON CORP.  
XX Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
PI Kealey JT;  
XX WPI; 1998-594485/50.  
XX Purification of telomerase on affinity material - useful for, e.g.  
XX diagnosis and treatment of cancer.  
XX Disclosure; Page 24; 76pp; English.  
XX The present sequence represents an antisense oligonucleotide directed  
CC against the human telomerase RNA component gene sequences. The  
CC oligonucleotide can be used as an affinity agent in the methods of the  
CC invention, which are used to purify human telomerase. The methods involve  
CC the use of several sequential steps, including the use of two matrices  
CC that bind molecules bearing negative charges, a matrix that binds  
CC molecules bearing positive charges, an affinity purification step and a  
CC size separation. Telomerase is a particular target of anticancer  
CC therapies, and is useful in assays for characterizing (pre)cancerous  
CC cells. Telomerase can also be used to screen for specific modulators, for  
CC biochemical analysis of its activity, and in preparation of antibodies.  
CC Fragments of telomerase, or nucleic acid encoding them, are used in  
CC vaccines, and for treating over expression of telomerase, particularly in  
CC cancer  
XX  
SQ Sequence 22 BP; 3 A; 6 C; 6 G; 7 T; 0 U; 0 Other;  
Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAACTGAGAAGGGCG 67  
ID 22 CTAACCCCTAACTGAGAAGGGCG 1  
XX  
XX Antisense oligonucleotide for human telomerase, BIOTIN P3.

RESULT 121  
AAZ23628/c  
ID AAZ23628 standard; DNA; 22 BP.  
XX AC AAZ23628;  
XX 07-JAN-2000 (first entry)  
XX Human clone 28-1 telomerase oligonucleotide oligo-P3.  
DE Telomerase; human; immune response; cancer; vaccine; treatment; disease;  
KW primer; ss.  
XX Synthetic.  
OS Homo sapiens.  
XX Key modified\_base 1 Location/Qualifiers  
FT /\*tag= a  
FT /note= "5'-biotinylated cytidine"  
XX US5968506-A.  
XX 19-OCT-1999.  
XX 04-APR-1997; 97US-00833377.  
XX 04-AUG-1995; 95US-00510736.  
XX (GERO-) GERON CORP.  
XX Atkinson EM, Lichtsteiner SP, Weinrich SL, Pruzan RA, Kealey JT;  
PI Vasserot AP;  
XX WPI; 1999-590379/50.  
XX Compositions comprising human telomerase, useful for treating diseases  
FT associated with overexpression of telomerase e.g. cancer.  
XX Disclosure; Col 43-44; 34pp; English.  
XX This invention describes a novel composition comprising human telomerase  
CC having at least 2000-fold (preferably at least 6000-fold) increased  
CC relative purity compared with crude extract of cells from adenovirus-  
CC transformed kidney cell line. The composition is useful for eliciting an  
CC immune response in animals and may therefore be used as a vaccine for  
CC treating diseases associated with the overexpression of telomerase e.g.  
CC cancer. AAZ23626-223637 represent oligonucleotides used in the isolation  
CC of human clone 28-1 which contains a fragment of the human telomerase  
CC described in the method of the invention  
XX  
SQ Sequence 22 BP; 3 A; 6 C; 6 G; 7 T; 0 U; 0 Other;  
Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAACTGAGAAGGGCG 67  
ID 22 CTAACCCCTAACTGAGAAGGGCG 1  
XX  
XX Antisense oligonucleotide for human telomerase, BIOTIN P3.

KW Human; Telomerase; vaccine; antibody; cancer; EF2H; nucleolin;  
 KW antisense oligonucleotide; BIOTIN P3; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX Key Location/Qualifiers  
 XX modified\_base 1 /\*tag= a  
 FT /mod\_base= C  
 FT /note= "C is biotinylated"  
 FT  
 XX USG261556-B1.  
 XX 17-JUL-2001.  
 XX 18-OCT-1999; 99US-00420056.  
 XX 04-AUG-1995; 95US-00510736.  
 PR 04-APR-1997; 97US-00833377.  
 XX (GERO-) GERON CORP.  
 XX  
 XX Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
 PI Kealey JT;  
 XX WPI; 2001-450477/48.  
 DR  
 XX Purified human telomerase, useful for inducing immune response in  
 XX animals, comprises several thousand folds increased purity compared with  
 PT cytoplasmic crude cell preparations.  
 PT  
 XX Disclosure; Col 18; 29pp; English.  
 XX  
 XX The sequence represents a biotinylated antisense oligonucleotide used in  
 CC the purification of human telomerase. The invention relates to a purified  
 CC human telomerase core enzyme protein comprising 2000-fold increased  
 CC purity compared with a crude extract of cells from adenovirus-transformed  
 CC kidney cell line (293 cells) and when associated with telomerase RNA  
 CC component has DNA polymerase activity and a molecular weight of 200-2000  
 CC kilo Daltons (kDa). The purified telomerase is useful for inducing a  
 CC humoral or cell-mediated immune response in an animal. Purified  
 CC telomerase or immunogenic fragments are useful as vaccines for treating  
 CC diseases associated with over-expression of telomerase, such as cancer  
 CC and for producing antibodies that recognize telomerase, which are useful  
 CC as affinity agents in isolating the proteins and for detecting the  
 CC presence of proteins in a sample, such as cell or tissue. Identification  
 CC of telomerase aids in diagnosis of cancer or pre-cancerous states.  
 CC Telomerase and/or telomerase associated proteins are also useful for  
 CC screening compounds to identify agents that alter the association of  
 CC telomerase-associated proteins, such as nucleolin or EF2H with telomerase  
 XX  
 SQ Sequence 22 BP; 3 A; 6 C; 6 G; 7 T; 0 U; 0 Other;  
 Query Match 4.9%; Score 22; DB 1; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 1e+02;  
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 46 CTAACCCCTAACTGAGAGGGCG 67  
 DB 22 CTAACCCCTAACTGAGAGGGCG 1  
 |||||  
 RESULT 123  
 ACC57544/c  
 ID ACC57544 standard; DNA; 22 BP.  
 XX  
 AC ACC57544;  
 XX  
 XX 28-JUL-2003 (first entry)  
 DT  
 DE Telomerase PCR primer.  
 XX  
 KW Telomerase; enzyme; RNA interference; short interfering RNA; siRNA;  
 cancer; tumour; cytostatic; contraceptive; immunosuppressive;  
 antiinfertility; fungicide; antiparasitic; antiinflammatory; human;  
 gene therapy; PCR; primer; ss.

KW cancer; tumour; cytostatic; contraceptive; immunosuppressive;  
 KW antiinfertility; fungicide; antiparasitic; antiinflammatory; human;  
 KW gene therapy; PCR; primer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2003034985-A2.  
 XX  
 PD 01-MAY-2003.  
 XX  
 XX 16-OCT-2002; 2002WO-US033146.  
 XX  
 XX 22-OCT-2001; 2001US-0345326P.  
 PR 20-FEB-2002; 2002US-0359196P.  
 PR 22-MAY-2002; 2002US-0383195P.  
 XX  
 XX (UVRP ) UNIV ROCHESTER.  
 XX  
 XX Rowley PT;  
 XX  
 XX WPI; 2003-403289/38.  
 XX  
 XX Novel nucleic acid encoding or comprising interfering RNAs which target  
 PT telomerase RNA, useful for inhibiting telomerase activity for treating  
 PT cancer, infertility and disorders of the immune system.  
 PT  
 XX Example 2; Page 27; 52pp; English.  
 XX  
 XX The present sequence is a PCR primer used for RT-PCR quantitation of  
 CC telomerase RNA (see also ACC57551). The invention relates to the  
 CC discovery that double-stranded interfering RNAs, such as short  
 CC interfering RNAs (siRNA), which target telomerase RNA or telomerase  
 CC reverse transcriptase (TERT) mRNA, are capable of inhibiting telomerase  
 CC activity. In cancer cells, inhibition of telomerase leads to telomere  
 CC shortening, end-to-end chromosomal fusion, and apoptosis. Telomerase  
 CC inhibition can also be used for treatment of infertility, for  
 CC contraception or sterilisation, for immunosuppression, for treatment of  
 CC yeast, parasite and fungal infections, and in antiinflammatory therapies  
 XX  
 SQ Sequence 22 BP; 6 A; 7 C; 7 G; 2 T; 0 U; 0 Other;  
 Query Match 4.9%; Score 22; DB 1; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 1e+02;  
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 176 ATGTCAGCTGCTGCCCGTTTCG 197  
 DB 22 ATGTCAGCTGCTGCCCGTTTCG 1  
 |||||  
 RESULT 124  
 ACC57543  
 ID ACC57543 standard; DNA; 22 BP.  
 XX  
 AC ACC57543;  
 XX  
 XX 28-JUL-2003 (first entry)  
 DT  
 DE Telomerase PCR primer.  
 XX  
 KW Telomerase; enzyme; RNA interference; short interfering RNA; siRNA;  
 KW cancer; tumour; cytostatic; contraceptive; immunosuppressive;  
 KW antiinfertility; fungicide; antiparasitic; antiinflammatory; human;  
 KW gene therapy; PCR; primer; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO2003034985-A2.  
 XX  
 PD 01-MAY-2003.  
 XX  
 XX 16-OCT-2002; 2002WO-US033146.  
 XX

PR 22-OCT-2001; 2001US-0345326P.  
PR 20-FEB-2002; 2002US-0359196P.  
PR 22-MAY-2002; 2002US-0383195P.  
XX  
XX (UYRP ) UNIV ROCHESTER.  
XX  
XX Rowley PT;  
XX  
XX WPI; 2003-403289/38.  
XX  
XX Novel nucleic acid encoding or comprising interfering RNAs which target  
PT telomerase RNA, useful for inhibiting telomerase activity for treating  
PT cancer, infertility and disorders of the immune system.  
XX  
XX Example 2; Page 27; 52pp; English.  
XX  
XX The present sequence is a PCR primer used for RT-PCR quantitation of  
CC telomerase RNA (see also ACC57551). The invention relates to the  
CC discovery that double-stranded interfering RNAs, such as short  
CC interfering RNAs (siRNA), which target telomerase RNA or telomerase  
CC reverse transcriptase (TERT) mRNA, are capable of inhibiting telomerase  
CC activity. In cancer cells, inhibition of telomerase leads to telomere  
CC shortening, end-to-end chromosomal fusion, and apoptosis. Telomerase  
CC inhibition can also be used for treatment of infertility, for  
CC contraception or sterilisation, for immunosuppression, for treatment of  
CC yeast, parasite and fungal infections, and in antiinflammatory therapies  
XX  
XX Sequence 22 BP; 2 A; 3 C; 11 G; 6 T; 0 U; 0 Other;  
SQ

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 19 CTGGAGGGGTGGTGGCCATTT 40  
DB 1 CTGGAGGGGTGGTGGCCATTT 22

RESULT 125  
ABX10983/C  
ID ABX10983 standard; DNA; 22 BP.  
XX  
XX AC ABX10983;  
XX  
XX 17-AUG-2003 (first entry)  
XX  
XX Human telomerase antisense oligonucleotide primer P3.  
XX  
XX Telomerase; antisense; primer; P3; ss; cancer.  
XX  
XX Synthetic.  
XX  
XX Key Location/Qualifiers  
FH modified\_base 1  
FT /\*tag= a  
FT /note= "Biotinylated"  
XX  
XX US6517834-B1.  
XX  
XX 11-FEB-2003.  
XX  
XX 20-NOV-2000; 2000US-00717828.  
XX  
XX 04-AUG-1995; 95US-00510736.  
XX  
XX 04-APR-1997; 97US-00833377.  
XX  
XX 18-OCT-1999; 99US-00420056.  
XX  
XX (GERO-) GERON CORP.  
XX  
XX Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
XX WPI; 2003-465598/44.  
XX

Composition useful e.g. in diagnosis of cancer comprises complex of  
telomerase protein with telomerase RNA component.  
XX  
XX Disclosure; Col 9; 24pp; English.  
XX  
XX This invention relates to a purified human telomerase protein, which when  
CC associated with telomerase RNA component has DNA polymerase activity.  
CC Also disclosed in the specification is a method for assessing a regulator  
CC (preferably a telomerase inhibitor or activator of telomerase involves  
CC measuring telomerase enzymatic activity of the composition in presence of  
CC a regulator. The telomerase protein of the invention may be used in  
CC developing and testing assays for measuring telomerase activity which are  
CC useful in characterising cancer and pre-cancer cells, for identifying and  
CC testing regulators of telomerase activity in in vitro assay and for  
CC preparing antibodies against telomerase. The mammalian telomerase protein  
CC of the invention is at least approximately 3000 fold more pure (in terms  
CC of telomerase activity per weight of protein) than a crude extract of  
CC cell from adenovirus-transformed kidney cell. Purified telomerase  
CC facilitates a thorough biochemical analysis of the enzyme's mechanism for  
CC developing mechanism-based regulators. The present sequence represents a  
CC human telomerase antisense oligonucleotide which has affinity to  
CC telomerase and is used to purify the telomerase protein of the invention  
XX  
XX Sequence 22 BP; 3 A; 6 C; 6 G; 7 T; 0 U; 0 Other;  
SQ

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 46 CTAACCTTAACCTGAGAGGGCG 67  
DB 22 CTAACCTTAACCTGAGAGGGCG 1

RESULT 126  
ADC35649/C  
ID ADC35649 standard; DNA; 22 BP.  
XX  
XX AC ADC35649;  
XX  
XX 18-DEC-2003 (first entry)  
XX  
XX Human telomerase RNA component antisense oligonucleotide seq id 2.  
XX  
XX mammalian telomerase protein; telomerase purification; telomere;  
KW anion exchange matrix; cation exchange matrix; selectivity matrix;  
KW gel filtration chromatography; gradient centrifugation;  
KW antisense oligonucleotide; ss.  
XX  
XX Homo sapiens.  
XX  
XX US6545133-B1.  
XX  
XX 08-APR-2003.  
XX  
XX 20-NOV-2000; 2000US-00717829.  
XX  
XX 04-AUG-1995; 95US-00510736.  
XX  
XX 04-APR-1997; 97US-00833377.  
XX  
XX 18-OCT-1999; 99US-00420056.  
XX  
XX (GERO-) GERON CORP.  
XX  
XX Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
XX WPI; 2003-742824/70.  
XX  
XX Obtaining telomerase, by preparing enriched solution from cell expressing  
PT telomerase, combining the solution with oligonucleotide having specific  
PT affinity for the protein and collecting protein bound to oligonucleotide.  
XX  
XX Disclosure; SEQ ID NO 2; 24pp; English.  
XX  
XX

CC The invention describes a method of obtaining mammalian telomerase  
CC protein (I). The method involves preparing enriched solution (ES) from a  
CC cell expressing telomerase where the component of (I) in ES is separated  
CC from other proteins expressed by cell by combining ES with  
CC oligonucleotide (O) having specific affinity for (I), and collecting  
CC protein bound to (O). The oligonucleotide comprises a retrievable label  
CC such as biotin and contains a sequence that is specifically recognized by  
CC telomerase protein. The oligonucleotide contains or does not contain the  
CC sequence (TTAGGG)<sub>3</sub>. The method further comprises combining a fraction  
CC containing telomerase protein with an anion exchange matrix, and  
CC collecting protein that binds the matrix, combining a fraction containing  
CC telomerase protein with a cation exchange matrix (such as a heparin  
CC matrix), and collecting protein that binds the matrix. The method  
CC comprises successively enriching fractions containing telomerase protein  
CC on several different ion exchange matrices and combining a fraction  
CC containing telomerase protein with an intermediate selectivity matrix,  
CC collecting protein that binds the matrix, where the intermediate  
CC selectivity matrix and separating a fraction containing the telomerase  
CC protein by gel filtration chromatography or gradient centrifugation. The  
CC telomerase is enriched from an extract of cells stably expressing  
CC telomerase. This sequence represents an antisense oligonucleotide to the  
CC RNA component of human telomerase that can be used in the purification  
CC method of the invention.

XX SQ Sequence 22 BP; 3 A; 6 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGGCG 67  
Db 22 CTAACCCCTAACTGAGAGGGCG 1  
|||||

RESULT 127

ADG62871/C

ID ADG62871 standard; DNA; 22 BP.

XX AC ADG62871;

XX DT 11-MAR-2004 (first entry)

XX DE Human telomerase RNA antisense oligonucleotide, P3.

XX KW Telomerase activity; therapy; cancer; cytostatic; antisense; ss.

XX OS Homo sapiens.

XX FH Key Location/Qualifiers

XX modified\_base 1

XX /\*tag= a

XX /mod\_base= OTHER

XX /note= "Biotin labelled"

XX US2003186282-A1.

XX PD 02-OCT-2003.

XX PF 24-DEC-2002; 2002US-00330872.

XX PR 04-AUG-1995; 95US-00510736.

XX PR 04-APR-1997; 97US-00833377.

XX PR 18-OCT-1999; 99US-00420056.

XX PR 20-NOV-2000; 2000US-00717828.

XX (WEIN/) WEINRICH S L.

XX (ATKI/) ATKINSON E M.

XX (LICH/) LICHTSTEINER S P.

XX (VASS/) VASSEROT A P.

XX (PRUZ/) PRUZAN R A.

XX PI Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;

XX WPI; 2003-811733/76.

XX Identifying telomerase regulators useful for treating cancer.

XX Disclosure; SEQ ID NO 2; 22pp; English.

XX The invention relates to a method for identifying regulators of  
CC telomerase activity that may be useful for treating cancers. The method  
CC may be used to identify regulators e.g. antibodies, of telomerase  
CC activity which may be useful as cancer treatments. It has been found that  
CC found that the cells of many human cancers have telomerase activity. This  
CC helps explain why cancer cells continue dividing without becoming  
CC senescent. If telomerase activity in cancer cells can be inhibited, the  
CC cancer cells are expected to reach senescence and cease dividing. The  
CC present sequence is human telomerase antisense oligonucleotide used to  
CC illustrate the method of the invention.

XX SQ Sequence 22 BP; 3 A; 6 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGGCG 67  
Db 22 CTAACCCCTAACTGAGAGGGCG 1  
|||||

RESULT 128

ACCS8032/C

ID ACCS8032 standard; DNA; 22 BP.

XX AC ACCS8032;

XX DT 11-AUG-2003 (first entry)

XX DE Telomerase PCR primer.

XX KW Telomerase; enzyme; RNA interference; short interfering RNA; siRNA;  
XX KW telomerase; cancer; tumour; cytostatic; contraceptive; immunosuppressive;  
XX KW antiinfertility; fungicide; antiparasitic; antiinflammatory; human;  
XX KW gene therapy; PCR; primer; ss.

XX OS Synthetic.

XX PN WO2003035667-A2.

XX PD 01-MAY-2003.

XX PF 16-OCT-2002; 2002WO-US033065.

XX PR 22-OCT-2001; 2001US-0345326P.

XX PR 20-FEB-2002; 2002US-0359196P.

XX PR 22-MAY-2002; 2002US-0383195P.

XX PA (UYRP ) UNIV ROCHESTER.

XX PI Rowley PT;

XX DR WPI; 2003-403336/38.

XX Novel double-stranded short interfering RNA having sense and antisense  
CC nucleic acids which are complementary to each other and to target nucleic  
CC acid e.g., telomerase RNA or mRNA encoding telomerase reverse  
CC transcriptase.

XX Example 2; Page 24; 37pp; English.

XX The present sequence is a PCR primer used for RT-PCR quantitation of  
CC telomerase RNA (see also ACCS8040). The invention relates to the  
CC discovery that double-stranded interfering RNAs, such as short  
CC interfering RNAs (siRNA), which target telomerase RNA or telomerase

CC reverse transcriptase (TERT) mRNA, are capable of inhibiting telomerase activity. In cancer cells, inhibition of telomerase leads to telomere shortening, end-to-end chromosomal fusion, and apoptosis. Telomerase inhibition can also be used for treatment of infertility, for CC contraception or sterilisation, for immunosuppression, for treatment of CC yeast, parasite and fungal infections, and in antiinflammatory therapies XX

SQ Sequence 22 BP; 6 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 176 ATGTCAGCTGCTGGCCGCTTCG 197  
|||||  
DB 22 ATGTCAGCTGCTGGCCGCTTCG 1

RESULT 129  
ACC58031

ID ACC58031 standard; DNA; 22 BP.

AC ACC58031;

DT 11-AUG-2003 (first entry)

DE Telomerase PCR primer.

XX Telomerase; enzyme; RNA interference; short interfering RNA; siRNA;  
KW telomerase; cancer; tumour; cytostatic; contraceptive; immunosuppressive;  
KW antinfertility; fungicide; antiparasitic; antiinflammatory; human;  
XX gene therapy; PCR; primer; ss.

OS Homo sapiens.

PN WO2003035667-A2.

PD 01-MAY-2003.

PF 16-OCT-2002; 2002WO-US033065.

PR 22-OCT-2001; 2001US-0345326P.

PR 20-FEB-2002; 2002US-0359196P.

PR 22-MAY-2002; 2002US-0383195P.

PA (UYRP ) UNIV ROCHESTER.

XX Rowley PT;

XX WPI; 2003-403336/38.

XX Novel double-stranded short interfering RNA having sense and antisense  
PT nucleic acids which are complementary to each other and to target nucleic  
PT acid e.g., telomerase RNA or mRNA encoding telomerase reverse  
PT transcriptase.

XX Example 2; Page 24; 37pp; English.

XX The present sequence is a PCR primer used for RT-PCR quantitation of  
CC telomerase RNA (see also ACC58040). The invention relates to the  
CC discovery that double-stranded interfering RNAs, such as short  
CC interfering RNAs (siRNA), which target telomerase RNA or telomerase  
CC reverse transcriptase (TERT) mRNA, are capable of inhibiting telomerase  
CC activity. In cancer cells, inhibition of telomerase leads to telomere  
CC shortening, end-to-end chromosomal fusion, and apoptosis. Telomerase  
CC inhibition can also be used for treatment of infertility, for  
CC contraception or sterilisation, for immunosuppression, for treatment of  
CC yeast, parasite and fungal infections, and in antiinflammatory therapies  
XX

SQ Sequence 22 BP; 2 A; 3 C; 11 G; 6 T; 0 U; 0 Other;

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 1e+02;

Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 19 CTGGAGGGGTGGGCAATT 40  
|||||  
DB 1 CTGGAGGGGTGGGCAATT 22

RESULT 130  
AAT11058/C

ID AAT11058 standard; DNA; 21 BP.

XX AAT11058;

DT 02-JUL-1996 (first entry)

DE Primer used for amplifying telomerase RNA fragments.

XX Telomerase; mammal; antisense; triplex forming oligonucleotide; plasmid;  
KW probe; primer; ribozyme; ss.

XX Synthetic.

XX WO9601614-A2.

XX 25-JAN-1996.

XX 07-JUL-1995; 95WO-US008620.

XX 07-JUL-1994; 94US-00272102.

PR 27-OCT-1994; 94US-00330123.

PR 13-FEB-1995; 95US-00387524.

PR 07-JUN-1995; 95US-00485778.

XX (COLD-) COLD SPRING HARBOR LAB.

PA (GERO-) GERON CORP.

XX Andrews WH, Avillon AA, Feng J, Funk W, Greider C, Marhuenda MA;

PI Villeponteau B;

DR WPI; 1996-097428/10.

XX RNA components of (non)human mammalian telomerase(s) - useful in studying

XX cell senescence and immortalisation.

PS Example 15; Page 59; 85pp; English.

XX The RNA components of (non) human mammalian telomerase(s) especially from  
CC mouse, rat and chinese hamster are all claimed. Antisense  
CC oligonucleotides can be used to block the activity of the telomerase;  
CC probes and primers can be used in detection; vectors and host cells  
CC transformed with the isolated telomerase genes can be used for production  
CC of telomerases; RNA and DNA ribozymes and triplex forming  
CC oligonucleotides directed against the telomerase genes can be used  
CC therapeutically as can plasmids. A mouse which lacks the telomerase gene  
CC (also claimed) can be used for study of telomere regulation in vivo, and  
CC the role it plays in immortalisation. Four primers (AAT11057, AAT11058  
CC and AAT11059, AAT11060) which are complementary to human telomerase RNA  
CC component sequences can be used to identify and amplify homologous  
CC sequences from other non-human mammals. The amplified fragments can then  
CC be used as probes to identify telomerase genes

XX Sequence 21 BP; 5 A; 5 C; 11 G; 0 T; 0 U; 0 Other;

Query Match 4.7%; Score 21; DB 1; Length 21;

Best Local Similarity 100.0%; Pred. No. 1.2e+02;

Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 184 TGCTGGCCCGTTCGCCCTCC 204

|||||  
DB 21 TGCTGGCCCGTTCGCCCTCC 1

RESULT 131



AA10301/c  
 ID AAT10301 standard; DNA; 21 BP.  
 XX AC AAT10301;  
 XX DT 10-SEP-1996 (first entry)  
 XX DE RNA component of non-human mammal telomerase cDNA PCR primer R7.  
 XX KW RNA component; telomerase; recombinant production; synthesis; mutant;  
 XX KW detection; mammalian; identification; modulating agent;  
 KW neoplastic condition; transcriptional regulatory sequence; gene therapy;  
 KW disease; polymerase chain reaction; PCR primer; non-human; ss.  
 XX OS Synthetic.  
 XX PN WO9601835-A1.  
 XX PD 25-JAN-1996.  
 XX PF 06-JUL-1995; 95WO-US008530.  
 XX PR 07-JUL-1994; 94US-00272102.  
 PR 27-OCT-1994; 94US-00330123.  
 PR 07-JUN-1995; 95US-00472802.  
 PR 07-JUN-1995; 95US-00482115.  
 XX PA (GERO-) GERON CORP.  
 XX PI Villeponteau B, Feng J, Funk W, Andrews WH;  
 XX WPI; 1996-097581/10.  
 DR RNA component of mammalian telomerase, esp. human - useful in identifying  
 XX e.g. candidate telomerase-modulating agents.  
 XX Example 9; Page 81; 114pp; English.  
 XX The present sequence is a PCR primer for the RNA component of a non-human  
 CC mammal telomerase (RCT), cDNA. The RCT can be used in the recombinant  
 CC prodn. of an active telomerase mol., capable of adding sequences to  
 CC chromosomal DNA telomeres, and in the synthesis of mutant sequences for  
 CC the detection of mutant mammalian telomerase RNA component  
 CC polynucleotides. The RCT may also be used in the identification of  
 CC telomerase modulating agents, and in the detection of telomerase related,  
 CC or neoplastic conditions in a patient. Polynucleotides of at least 25  
 CC consecutive nucleotides identical, or complementary to the RCT sequence  
 CC linked to heterologous transcriptional regulatory sequences, can be used  
 CC for the gene therapy of human diseases  
 XX Sequence 21 BP; 5 A; 5 C; 11 G; 0 T; 0 U; 0 Other;  
 SQ Query Match 4.7%; Score 21; DB 1; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;  
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 184 TGCTGGCCCGTTCGCCCTCC 204  
 Db 21 TGCTGGCCCGTTCGCCCTCC 1  
 RESULT 132  
 AAT58813/c  
 ID AAT58813 standard; DNA; 21 BP.  
 XX AC AAT58813;  
 XX DT 20-NOV-1997 (first entry)  
 XX DE Human telomerase PCR 3'-primer R7.  
 XX KW Cancer; eukaryotic parasite; hTR; vertebrate telomerase; yeast; protozoa;  
 KW tumour; antibody; polymerase chain reaction; ss.  
 XX OS Synthetic.

XX OS Synthetic.  
 XX PN WO9640868-A1.  
 XX PD 19-DEC-1996.  
 XX PF 06-JUN-1996; 96WO-US009517.  
 XX PR 07-JUN-1995; 95US-00478352.  
 XX PA (COLD-) COLD SPRING HARBOR LAB.  
 XX PI Greider C, Autexier C;  
 XX WPI; 1997-099928/09.  
 XX DNA encoding essential RNA components of human telomerase - also  
 PT truncated or recombinant telomerase, useful for diagnosis and treatment  
 PT of cancer and infection by eukaryotic parasites.  
 XX Example 5; Page 32; 48pp; English.  
 XX The present sequence represents PCR 3'-primer R7 used for amplifying the  
 CC human telomerase (hTR). The RNA and DNA can be used in hybridisation  
 CC assays to detect or quantify telomerase activity in cells, tissue or  
 CC fluid samples, e.g. for diagnosis of eukaryotic parasites (yeast and  
 CC protozoa) or tumours. It is also useful as primers for amplification  
 CC assays. The truncated or recombinant vertebrate telomerase is used  
 CC therapeutically to increase telomerase activity (also as reagents in the  
 CC screening assay) while the RNA or other inhibitors such as antisense  
 CC molecules, are used to reduce such activity. Typical applications are  
 CC initiation/restoration of activity to cause senescence or to prevent  
 CC immortalisation of cells in tumours or parasites. The DNA is also used to  
 CC produce recombinant telomerase, which can then be used conventionally to  
 CC raise antibodies for diagnostic detection of telomerase. Detecting  
 CC telomerase allows early diagnosis of tumour or infection, before clinical  
 CC signs manifest. Telomerase inhibitors directed against e.g. Trypanosoma  
 CC should cause fewer side effects than drugs currently used to treat such  
 CC infections. The DNA encodes those parts of hTR RNA essential for activity  
 CC but are significantly shorter than the endogenous RNA component  
 XX Sequence 21 BP; 5 A; 5 C; 11 G; 0 T; 0 U; 0 Other;  
 SQ Query Match 4.7%; Score 21; DB 1; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;  
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 184 TGCTGGCCCGTTCGCCCTCC 204  
 Db 21 TGCTGGCCCGTTCGCCCTCC 1  
 RESULT 133  
 ADF93862  
 ID ADF93862 standard; RNA; 21 BP.  
 XX AC ADF93862;  
 XX DT 26-FEB-2004 (first entry)  
 XX DE Human TERT siRNA, SEQ ID 589.  
 XX Cytostatic; vasotropic; protozoicide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; tERC;  
 KW RNA interference; short interfering nucleic acid; siNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
 XX OS Synthetic.

OS Homo sapiens.  
XX W02003070742-A1.  
XX  
XX 28-AUG-2003.  
XX  
XX 11-FEB-2003; 2003WO-US004088.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Mcswiggen J, Beigelman L;  
XX WPI; 2003-689777/65.  
XX  
XX New short interfering nucleic acid downregulates expression of the  
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
XX Example 3; SEQ ID NO 589; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the one or more telomerase genes by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of the telomerase genes in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, infectious diseases (specifically  
CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents a siRNA targeted to the human TERT mRNA transcript.  
SQ Sequence 21 BP; 2 A; 7 C; 8 G; 0 T; 4 U; 0 Other;  
  
Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 81.0%; Pred. No. 1.2e+02;  
Matches 17; Conservative 4; Mismatches 0; Indels 0; Gaps 0;  
  
QY 397 GCGGCGCGATTCCCTGAGCTG 417  
DB 1 GCGGCGCGAUCUCCUGAGCUG 21  
  
RESULT 134  
ADF93867/C  
ID ADF93867 standard; RNA; 21 BP.  
XX  
XX ADF93867;  
XX  
XX 26-FEB-2004 (first entry)  
XX  
XX Human TERT siRNA, SEQ ID 594.  
XX

KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; ss.  
XX  
XX Synthetic.  
OS Homo sapiens.  
XX  
XX W02003070742-A1.  
XX  
XX 28-AUG-2003.  
XX  
XX 11-FEB-2003; 2003WO-US004088.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Mcswiggen J, Beigelman L;  
XX WPI; 2003-689777/65.  
XX  
XX New short interfering nucleic acid downregulates expression of the  
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
XX Example 3; SEQ ID NO 594; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the one or more telomerase genes by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of the telomerase genes in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, infectious diseases (specifically  
CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents a siRNA targeted to the human TERT mRNA transcript.  
XX  
XX Sequence 21 BP; 3 A; 8 C; 8 G; 0 T; 2 U; 0 Other;  
  
Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1.2e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 395 GCGGCGCGATTCCCTGAGC 415  
DB 21 GCGGCGCGGATTCCCTGAGC 1

```
RESULT 135
ADF93860
ID ADF93860 standard; RNA; 21 BP.
XX
AC ADF93860;
XX
XX 26-FEB-2004 (first entry)
XX
XX Human TERT siRNA, SEQ ID 587.
XX
XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;
XX neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;
XX antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;
XX RNA interference; short interfering nucleic acid; siRNA;
XX short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
XX short hairpin RNA; shRNA; expression modulation; gene therapy;
XX drug screening; diagnosis; therapeutic target identification;
XX pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.
XX
XX Synthetic.
XX Homo sapiens.
XX WO2003070742-A1.
XX
XX 28-AUG-2003.
XX
XX 11-FEB-2003; 2003WO-US004088.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX 11-MAR-2002; 2002US-0363124P.
XX 06-JUN-2002; 2002US-0386782P.
XX 17-JUL-2002; 2002US-0396600P.
XX 29-AUG-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J, Beigelman L;
XX WPT; 2003-689777/65.
XX
XX New short interfering nucleic acid downregulates expression of the
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.
XX
XX Example 3; SEQ ID NO 587; 145pp; English.
XX
XX The invention relates to short interfering nucleic acids (siNA) which
XX downregulate expression of the one or more telomerase genes by RNA
XX interference. The siNAs may or may not comprise ribonucleotides and may
XX be double or single stranded. They further comprise sense and antisense
XX regions, or alternatively are assembled from a sense oligonucleotide and
XX an antisense oligonucleotide. Specifically, the siNAs include short
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
XX can contain deoxyribonucleotides, and can be chemically synthesised,
XX expressed from a vector or enzymatically synthesised. The invention also
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates
XX and/or complexes of siNA; and vectors that express siNA. The siNAs are
XX used to modulate expression of the telomerase genes in cells, tissue
XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
XX transplants for the treatment of a variety of conditions. They may be
XX
```

```
Sequence 21 BP; 2 A; 10 C; 3 G; 0 T; 6 U; 0 Other;
```

```
Query Match 4.7%; Score 21; DB 1; Length 21;
Best Local Similarity 71.4%; Pred. No. 1.2e+02;
Matches 15; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

QY 138 CTGCGCGCTTCCACCGTTCAT 158
|:|||||:::|||||:::|:|:|
Db 1 CUGCCGCCUCCACCGGUUCAU 21

RESULT 136
ADF93864/c
ID ADF93864 standard; RNA; 21 BP.
XX
AC ADF93864;
XX
XX 26-FEB-2004 (first entry)
XX
XX Human TERT siRNA, SEQ ID 591.
XX
XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;
XX neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;
XX antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;
XX RNA interference; short interfering nucleic acid; siNA;
XX short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
XX short hairpin RNA; shRNA; expression modulation; gene therapy;
XX drug screening; diagnosis; therapeutic target identification;
XX pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.
XX
XX Synthetic.
XX Homo sapiens.
XX WO2003070742-A1.
XX
XX 28-AUG-2003.
XX
XX 11-FEB-2003; 2003WO-US004088.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX 11-MAR-2002; 2002US-0363124P.
XX 06-JUN-2002; 2002US-0386782P.
XX 17-JUL-2002; 2002US-0396600P.
XX 29-AUG-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J, Beigelman L;
XX WPT; 2003-689777/65.
XX
XX New short interfering nucleic acid downregulates expression of the
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.
XX
XX Example 3; SEQ ID NO 591; 145pp; English.
XX
XX The invention relates to short interfering nucleic acids (siNA) which
XX downregulate expression of the one or more telomerase genes by RNA
XX interference. The siNAs may or may not comprise ribonucleotides and may
XX be double or single stranded. They further comprise sense and antisense
XX regions, or alternatively are assembled from a sense oligonucleotide and
XX an antisense oligonucleotide. Specifically, the siNAs include short
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
XX can contain deoxyribonucleotides, and can be chemically synthesised,
XX expressed from a vector or enzymatically synthesised. The invention also
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates
XX and/or complexes of siNA; and vectors that express siNA. The siNAs are
XX used to modulate expression of the telomerase genes in cells, tissue
XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
XX transplants for the treatment of a variety of conditions. They may be
XX
```

CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siRNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents a siRNA targeted to the human TERT mRNA transcript.  
 XX  
 XX Sequence 21 BP; 4 A; 13 C; 3 G; 0 T; 1 U; 0 Other;  
 SQ  
 Query Match 4.7%; Score 21; DB 1; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;  
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 XX  
 QY 2 GGTTCGGAGGCTGGCTGG 22  
 Db 21 GGTTCGGAGGCTGGCTGG 1  
 RESULT 137  
 ADF93866/c  
 ID ADF93866 standard; RNA; 21 BP.  
 XX  
 AC ADF93866;  
 XX  
 DT 26-FEB-2004 (first entry)  
 XX  
 DE Human TERT siRNA, SEQ ID 593.  
 XX  
 KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; tarc;  
 KW RNA interference; short interfering nucleic acid; siRNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN WO2003070742-A1.  
 XX  
 PD 28-AUG-2003.  
 XX  
 PF 11-FEB-2003; 2003WO-US004088.  
 XX  
 PR 20-FEB-2002; 2002US-0358580P.  
 PR 11-MAR-2002; 2002US-0363124P.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 17-JUL-2002; 2002US-0396600P.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 15-JAN-2003; 2003US-0440129P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 PI Mcswiggen J, Beigelman L;  
 XX  
 XX WPI; 2003-689777/65.  
 XX  
 PT New short interfering nucleic acid downregulates expression of the  
 PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
 XX  
 PS Example 3; SEQ ID NO 593; 145pp; English.  
 XX  
 CC The invention relates to short interfering nucleic acids (siNA) which  
 CC downregulate expression of the one or more telomerase genes by RNA  
 CC interference. The siRNAs may or may not comprise ribonucleotides and may  
 CC be double or single stranded. They further comprise sense and antisense  
 CC regions, or alternatively are assembled from a sense oligonucleotide and

CC an antisense oligonucleotide. Specifically, the siRNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siRNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised.  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
 CC and/or complexes of siNA; and vectors that express siNA. The siRNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siRNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents a siRNA targeted to the human TERT mRNA transcript.  
 XX  
 XX Sequence 21 BP; 1 A; 5 C; 10 G; 0 T; 5 U; 0 Other;  
 SQ

Query Match 4.7%; Score 21; DB 1; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 1.2e+02;  
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 283 GCACCCACTGCCACCGCGAAG 303  
 Db 21 GCACCCACTGCCACCGCGAAG 1

RESULT 138  
 ADF93859  
 ID ADF93859 standard; RNA; 21 BP.  
 XX  
 AC ADF93859;  
 XX  
 DT 26-FEB-2004 (first entry)  
 XX  
 DE Human TERT siRNA, SEQ ID 586.  
 XX  
 KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; tarc;  
 KW RNA interference; short interfering nucleic acid; siNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN WO2003070742-A1.  
 XX  
 PD 28-AUG-2003.  
 XX  
 PF 11-FEB-2003; 2003WO-US004088.  
 XX  
 PR 20-FEB-2002; 2002US-0358580P.  
 PR 11-MAR-2002; 2002US-0363124P.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 17-JUL-2002; 2002US-0396600P.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 15-JAN-2003; 2003US-0440129P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 PI Mcswiggen J, Beigelman L;  
 XX  
 XX WPI; 2003-689777/65.  
 XX

PT New short interfering nucleic acid downregulates expression of the  
 XX telomerase gene useful e.g. for treatment and diagnosis of cancer.  
 PS Example 3; SEQ ID NO 586; 145pp; English.  
 XX  
 CC The invention relates to short interfering nucleic acids (siNA) which  
 CC downregulate expression of the one or more telomerase genes by RNA  
 CC interference. The siNAs may or may not comprise ribonucleotides and may  
 CC be double or single stranded. They further comprise sense and antisense  
 CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siNA. The siNAs are  
 CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents a siRNA targeted to the human TERT mRNA transcript.  
 XX  
 SQ Sequence 21 BP; 2 A; 3 C; 12 G; 0 T; 4 U; 0 Other;  
 Query Match 4.7%; Score 21; DB 1; Length 21;  
 Best Local Similarity 81.0%; Pred. No. 1.2e+02;  
 Matches 17; Conservative 4; Mismatches 0; Indels 0; Gaps 0;  
 QY 4 TTGGGAGGCTGGGCTGGGA 24  
 :::::::::::::::  
 Db 1 UUGCGAGGGUGGCGCCGGGA 21  
 RESULT 139  
 ADF93861  
 ID ADF93861 standard; RNA; 21 BP.  
 XX  
 AC ADF93861;  
 DT 26-FEB-2004 (first entry)  
 XX  
 DE Human TERT siRNA, SEQ ID 588.  
 XX  
 KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
 KW RNA interference; short interfering nucleic acid; siNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN WO2003070742-A1.  
 XX  
 PD 28-AUG-2003.  
 XX  
 PF 11-FEB-2003; 2003WO-US004088.  
 XX  
 PR 20-FEB-2002; 2002US-0358580P.  
 PR 11-MAR-2002; 2002US-0363124P.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 17-JUL-2002; 2002US-0396600P.  
 PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 15-JAN-2003; 2003US-0440129P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 XX Mcswiggen J, Beigelman L;  
 XX WPI; 2003-689777/65.  
 XX  
 PT New short interfering nucleic acid downregulates expression of the  
 XX telomerase gene useful e.g. for treatment and diagnosis of cancer.  
 PS Example 3; SEQ ID NO 588; 145pp; English.  
 XX  
 CC The invention relates to short interfering nucleic acids (siNA) which  
 CC downregulate expression of the one or more telomerase genes by RNA  
 CC interference. The siNAs may or may not comprise ribonucleotides and may  
 CC be double or single stranded. They further comprise sense and antisense  
 CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
 CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents a siRNA targeted to the human TERT mRNA transcript.  
 XX  
 SQ Sequence 21 BP; 6 A; 9 C; 5 G; 0 T; 1 U; 0 Other;  
 Query Match 4.7%; Score 21; DB 1; Length 21;  
 Best Local Similarity 95.2%; Pred. No. 1.2e+02;  
 Matches 20; Conservative 1; Mismatches 0; Indels 0; Gaps 0;  
 QY 285 ACCCACTGCCCGCGAAGAG 305  
 :::::::::::::::  
 Db 1 ACCCACUGCCACCGCGAAGAG 21  
 RESULT 140  
 ADF93865/c  
 ID ADF93865 standard; RNA; 21 BP.  
 XX  
 AC ADF93865;  
 XX  
 DT 26-FEB-2004 (first entry)  
 XX  
 DE Human TERT siRNA, SEQ ID 592.  
 XX  
 KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
 KW RNA interference; short interfering nucleic acid; siNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN WO2003070742-A1.



KW Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;  
 XX amyotrophic lateral sclerosis; gene therapy; ss; hTR.

OS Unidentified.

PN WO2003074654-A2.

XX 12-SEP-2003.

XX 20-FEB-2003; 2003WO-US005028.

XX 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX (STRN-) SIRNA THERAPEUTICS INC.

FA Mcswiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;  
 XX Jamison S, Usman N, Thompson J;

PI WPI; 2003-731676/69.

DR WPI; 2003-731676/69.

XX New double-stranded short interfering nucleic acid molecule, useful for  
 PT down-regulating the expression of an endogenous mammalian target gene or  
 PT for treating diseases that respond to modulation of gene expression or  
 PT activity.

XX Example 24; SEQ ID NO 594; 593pp; English.

XX The invention relates to a double-stranded short interfering nucleic acid  
 CC (siNA) molecule that down-regulates expression of an endogenous mammalian  
 CC target gene comprising one or more chemical modifications and each strand  
 CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of  
 CC the invention demonstrates antiarteriosclerotic, neuroprotective,  
 CC neurotropic, antiparkinsonian and anticonvulsant activities and may be  
 CC useful for down-regulating the expression of an endogenous mammalian  
 CC target gene and therefore in the treatment of any disease or condition  
 CC that responds to modulation of gene expression or activity in a cell,  
 CC tissue or organism. The disease or condition may include pulmonary  
 CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,  
 CC Parkinson's disease, epilepsy, dementia, huntington's disease or  
 CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for  
 CC gene therapy applications. The current sequence is that of the siNA RNA  
 CC of the invention.

XX Sequence 21 BP; 2 A; 3 C; 12 G; 0 T; 4 U; 0 Other;

Query Match 4.7%; Score 21; DB 1; Length 21;  
 Best Local Similarity 81.0%; Pred. No. 1.2e+02;  
 Matches 17; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 4 TTGCGGAGGGTGGGCGCTGGGA 24

DB 1 UUGCGGAGGGGUGGCCUGGGA 21

RESULT 143

ADG30030

ID ADG30030 standard; RNA; 21 BP.

XX AC ADG30030;

XX 26-FEB-2004 (first entry)

XX hTR-targeted siNA RNA - SEQ ID 596.

XX double-stranded short interfering nucleic acid; siNA;  
 KW antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;  
 KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;

KW Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;  
 XX amyotrophic lateral sclerosis; gene therapy; ss; hTR.

OS Unidentified.

PN WO2003074654-A2.

XX 12-SEP-2003.

XX 20-FEB-2003; 2003WO-US005028.

XX 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX (SIRN-) SIRNA THERAPEUTICS INC.

FA Mcswiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;  
 XX Jamison S, Usman N, Thompson J;

PI WPI; 2003-731676/69.

DR WPI; 2003-731676/69.

XX New double-stranded short interfering nucleic acid molecule, useful for  
 PT down-regulating the expression of an endogenous mammalian target gene or  
 PT for treating diseases that respond to modulation of gene expression or  
 PT activity.

XX Example 24; SEQ ID NO 596; 593pp; English.

XX The invention relates to a double-stranded short interfering nucleic acid  
 CC (siNA) molecule that down-regulates expression of an endogenous mammalian  
 CC target gene comprising one or more chemical modifications and each strand  
 CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of  
 CC the invention demonstrates antiarteriosclerotic, neuroprotective,  
 CC neurotropic, antiparkinsonian and anticonvulsant activities and may be  
 CC useful for down-regulating the expression of an endogenous mammalian  
 CC target gene and therefore in the treatment of any disease or condition  
 CC that responds to modulation of gene expression or activity in a cell,  
 CC tissue or organism. The disease or condition may include pulmonary  
 CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,  
 CC Parkinson's disease, epilepsy, dementia, huntington's disease or  
 CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for  
 CC gene therapy applications. The current sequence is that of the siNA RNA  
 CC of the invention.

XX Sequence 21 BP; 6 A; 9 C; 5 G; 0 T; 1 U; 0 Other;

Query Match 4.7%; Score 21; DB 1; Length 21;  
 Best Local Similarity 95.2%; Pred. No. 1.2e+02;  
 Matches 20; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 285 ACCCACTGCCACCCGGAAGAG 305

DB 1 ACCCACUGCCACCCGGAAGAG 21

RESULT 144

ADG30036/C

ID ADG30036 standard; RNA; 21 BP.

XX AC ADG30036;

XX 26-FEB-2004 (first entry)

XX hTR-targeted siNA RNA - SEQ ID 602.

XX double-stranded short interfering nucleic acid; siNA;  
 KW antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;  
 KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;

KW Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;  
KW amyotrophic lateral sclerosis; gene therapy; ss; htr.  
XX Unidentified.  
XX WO2003074654-A2.  
XX 12-SEP-2003.  
XX 20-FEB-2003; 2003WO-US005028.  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX (SIRN-) SIRNA THERAPEUTICS INC.  
XX Mcswiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;  
PI Jamison S, Usman N, Thompson J;  
XX WPI; 2003-731676/69.  
XX New double-stranded short interfering nucleic acid molecule, useful for  
PT down-regulating the expression of an endogenous mammalian target gene or  
PT for treating diseases that respond to modulation of gene expression or  
PT activity.  
XX Example 24; SEQ ID NO 602; 593pp; English.  
XX The invention relates to a double-stranded short interfering nucleic acid  
CC (siNA) molecule that down-regulates expression of an endogenous mammalian  
CC target gene comprising one or more chemical modifications and each strand  
CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of  
CC the invention demonstrates antiarteriosclerotic, neuroprotective,  
CC neurotropic, antiparkinsonian and anticonvulsant activities and may be  
CC useful for down-regulating the expression of an endogenous mammalian  
CC target gene and therefore in the treatment of any disease or condition  
CC that responds to modulation of gene expression or activity in a cell,  
CC tissue or organism. The disease or condition may include pulmonary  
CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,  
CC Parkinson's disease, epilepsy, dementia, huntington's disease or  
CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for  
CC gene therapy applications. The current sequence is that of the siNA RNA  
CC of the invention.  
XX SQ Sequence 21 BP; 3 A; 8 C; 8 G; 0 T; 2 U; 0 Other;  
Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1.2e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 395 GCGGCGCGGATTCCTGAGC 415  
DB 21 GCGGCGCGGATTCCTGAGC 1  
RESULT 145  
ADG30035/C  
ID ADG30035 standard; RNA; 21 BP.  
XX AC ADG30035;  
XX 26-FEB-2004 (first entry)  
DT hTR-targeted siNA RNA - SEQ ID 601.  
DE double-stranded short interfering nucleic acid; siNA;  
KW antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;  
KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;

KW Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;  
KW amyotrophic lateral sclerosis; gene therapy; ss; htr.  
XX Unidentified.  
XX WO2003074654-A2.  
XX 12-SEP-2003.  
XX 20-FEB-2003; 2003WO-US005028.  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX (SIRN-) SIRNA THERAPEUTICS INC.  
XX Mcswiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;  
PI Jamison S, Usman N, Thompson J;  
XX WPI; 2003-731676/69.  
XX New double-stranded short interfering nucleic acid molecule, useful for  
PT down-regulating the expression of an endogenous mammalian target gene or  
PT for treating diseases that respond to modulation of gene expression or  
PT activity.  
XX Example 24; SEQ ID NO 601; 593pp; English.  
XX The invention relates to a double-stranded short interfering nucleic acid  
CC (siNA) molecule that down-regulates expression of an endogenous mammalian  
CC target gene comprising one or more chemical modifications and each strand  
CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of  
CC the invention demonstrates antiarteriosclerotic, neuroprotective,  
CC neurotropic, antiparkinsonian and anticonvulsant activities and may be  
CC useful for down-regulating the expression of an endogenous mammalian  
CC target gene and therefore in the treatment of any disease or condition  
CC that responds to modulation of gene expression or activity in a cell,  
CC tissue or organism. The disease or condition may include pulmonary  
CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,  
CC Parkinson's disease, epilepsy, dementia, huntington's disease or  
CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for  
CC gene therapy applications. The current sequence is that of the siNA RNA  
CC of the invention.  
XX SQ Sequence 21 BP; 1 A; 5 C; 10 G; 0 T; 5 U; 0 Other;  
Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1.2e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 283 GCACCCACTGCCACCGCGAAG 303  
DB 21 GCACCCACTGCCACCGCGAAG 1  
RESULT 146  
ADG30029  
ID ADG30029 standard; RNA; 21 BP.  
XX AC ADG30029;  
XX 26-FEB-2004 (first entry)  
DT hTR-targeted siNA RNA - SEQ ID 595.  
DE double-stranded short interfering nucleic acid; siNA;  
KW antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;  
KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;



KW Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;  
 KW amyotrophic lateral sclerosis; gene therapy; ss; htr.  
 XX  
 OS Unidentified.  
 XX  
 PN WO2003074654-A2.  
 XX  
 PD 12-SEP-2003.  
 XX  
 PF 20-FEB-2003; 2003WO-US005028.  
 XX  
 PR 20-FEB-2002; 2002US-0358580P.  
 PR 11-MAR-2002; 2002US-0363124P.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 15-JAN-2003; 2003US-0440129P.  
 XX  
 XX (STRN-) SIRNA THERAPEUTICS INC.  
 FA  
 XX Mcswiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;  
 PI Jamison S, Usman N, Thompson J;  
 XX  
 XX WPI; 2003-731676/69.  
 DR  
 XX

PT New double-stranded short interfering nucleic acid molecule, useful for  
 PT down-regulating the expression of an endogenous mammalian target gene or  
 PT for treating diseases that respond to modulation of gene expression or  
 PT activity.  
 XX  
 XX Example 24; SEQ ID NO 595; 593pp; English.  
 PS  
 XX

CC The invention relates to a double-stranded short interfering nucleic acid  
 CC (siNA) molecule that down-regulates expression of an endogenous mammalian  
 CC target gene comprising one or more chemical modifications and each strand  
 CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of  
 CC the invention demonstrates antiarteriosclerotic, neuroprotective,  
 CC neurotropic, antiparkinsonian and anticonvulsant activities and may be  
 CC useful for down-regulating the expression of an endogenous mammalian  
 CC target gene and therefore in the treatment of any disease or condition  
 CC that responds to modulation of gene expression or activity in a cell,  
 CC tissue or organism. The disease or condition may include pulmonary  
 CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,  
 CC Parkinson's disease, epilepsy, dementia, huntington's disease or  
 CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for  
 CC gene therapy applications. The current sequence is that of the siNA RNA  
 CC of the invention.  
 XX

SQ Sequence 21 BP; 2 A; 10 C; 3 G; 0 T; 6 U; 0 Other;

Query Match 4.7%; Score 21; DB 1; Length 21;  
 Best Local Similarity 71.4%; Pred. No. 1.2e+02; Indels 0; Gaps 0;  
 Matches 15; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

Qy 138 CTGGCGCCTTCACCGTTTCAT 158  
 :|||||:|||||:|||||:  
 Db 1 CUGCGCCUCCACCGUUCAU 21

RESULT 147  
 ADG30033/C  
 ID ADG30033 standard; RNA; 21 BP.  
 XX  
 AC ADG30033;  
 XX  
 XX 26-FEB-2004 (first entry)  
 DT  
 XX  
 XX htr-targeted siNA RNA - SEQ ID 599.

XX double-stranded short interfering nucleic acid; siNA;  
 KW antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;  
 KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;

KW Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;  
 KW amyotrophic lateral sclerosis; gene therapy; ss; htr.  
 XX  
 OS Unidentified.  
 XX  
 PN WO2003074654-A2.  
 XX  
 PD 12-SEP-2003.  
 XX  
 PF 20-FEB-2003; 2003WO-US005028.  
 XX  
 PR 20-FEB-2002; 2002US-0358580P.  
 PR 11-MAR-2002; 2002US-0363124P.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 15-JAN-2003; 2003US-0440129P.  
 XX  
 XX (STRN-) SIRNA THERAPEUTICS INC.  
 FA  
 XX Mcswiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;  
 PI Jamison S, Usman N, Thompson J;  
 XX  
 XX WPI; 2003-731676/69.  
 DR  
 XX

PT New double-stranded short interfering nucleic acid molecule, useful for  
 PT down-regulating the expression of an endogenous mammalian target gene or  
 PT for treating diseases that respond to modulation of gene expression or  
 PT activity.  
 XX  
 XX Example 24; SEQ ID NO 599; 593pp; English.  
 PS  
 XX

CC The invention relates to a double-stranded short interfering nucleic acid  
 CC (siNA) molecule that down-regulates expression of an endogenous mammalian  
 CC target gene comprising one or more chemical modifications and each strand  
 CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of  
 CC the invention demonstrates antiarteriosclerotic, neuroprotective,  
 CC neurotropic, antiparkinsonian and anticonvulsant activities and may be  
 CC useful for down-regulating the expression of an endogenous mammalian  
 CC target gene and therefore in the treatment of any disease or condition  
 CC that responds to modulation of gene expression or activity in a cell,  
 CC tissue or organism. The disease or condition may include pulmonary  
 CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,  
 CC Parkinson's disease, epilepsy, dementia, huntington's disease or  
 CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for  
 CC gene therapy applications. The current sequence is that of the siNA RNA  
 CC of the invention.  
 XX

SQ Sequence 21 BP; 4 A; 13 C; 3 G; 0 T; 1 U; 0 Other;

Query Match 4.7%; Score 21; DB 1; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 1.2e+02; Indels 0; Gaps 0;  
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GGTTCGCGAGGGTGGCGCTGG 22  
 :|||||:|||||:|||||:  
 Db 21 GGTTCGCGAGGGTGGCGCTGG 1

RESULT 148  
 ADG30034/C  
 ID ADG30034 standard; RNA; 21 BP.  
 XX  
 AC ADG30034;  
 XX  
 XX 26-FEB-2004 (first entry)  
 DT  
 XX  
 XX htr-targeted siNA RNA - SEQ ID 600.

XX double-stranded short interfering nucleic acid; siNA;  
 KW antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;  
 KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;

KW Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;  
KW amyotrophic lateral sclerosis; gene therapy; ss; hTR.  
XX Unidentified.  
OS  
XX  
XX WO2003074654-A2.  
XX  
XX 12-SEP-2003.  
XX  
XX 20-FEB-2003; 2003WO-US005028.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
XX (SIRN-) SIRNA THERAPEUTICS INC.  
PA Meswigen J, Beigelman L, Chowrira B, Pavco P, Posnaugh K;  
PI Jamison S, Usman N, Thompson J;  
PI  
XX WPI; 2003-731676/69.  
XX  
XX New double-stranded short interfering nucleic acid molecule, useful for  
PT down-regulating the expression of an endogenous mammalian target gene or  
PT for treating diseases that respond to modulation of gene expression or  
PT activity.  
XX  
XX Example 24; SEQ ID NO 600; 593pp; English.  
XX  
XX The invention relates to a double-stranded short interfering nucleic acid  
CC (siNA) molecule that down-regulates expression of an endogenous mammalian  
CC target gene comprising one or more chemical modifications and each strand  
CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of  
CC the invention demonstrates antiarteriosclerotic, neuroprotective,  
CC neurotropic, antiparkinsonian and anticonvulsant activities and may be  
CC useful for down-regulating the expression of an endogenous mammalian  
CC target gene and therefore in the treatment of any disease or condition  
CC that responds to modulation of gene expression or activity in a cell,  
CC tissue or organism. The disease or condition may include pulmonary  
CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,  
CC Parkinson's disease, epilepsy, dementia, huntington's disease or  
CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for  
CC gene therapy applications. The current sequence is that of the siNA RNA  
CC of the invention.  
XX  
XX Sequence 21 BP; 5 A; 4 C; 11 G; 0 T; 1 U; 0 Other;  
SQ  
Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1.2e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 136 GCGTGGCGCCTTCACCGTTC 156  
DB 21 GCGTGGCGCCTTCACCGTTC 1  
RESULT 149  
ADQ94244  
ID ADQ94244 standard; DNA; 21 BP.  
XX  
XX ADQ94244;  
AC  
XX 21-OCT-2004 (first entry)  
XX  
XX Short hairpin RNA oligonucleotide SHRNA12.  
DE  
DE ss; antiarthritic; antirheumatic; cardiovascular; cytostatic;  
KW gene therapy; adeno-associated virus; RNAi; RNA interference;  
KW short interfering RNA; gene silencing; short hairpin RNA; cancer;  
KW short interfering RNA; gene silencing; short hairpin RNA; cancer;

KW cardiovascular disease; immune disease; rheumatoid arthritis;  
KW angiogenic abnormality.  
XX  
XX Synthetic.  
OS  
XX WO2004063380-A1.  
XX  
XX 29-JUL-2004.  
XX  
XX 07-NOV-2003; 2003WO-CN000939.  
XX  
XX 07-NOV-2002; 2002CN-00149319.  
XX (AGTC-) AGTC GENE TECHNOLOGY CO LTD.  
XX Wu X, Dong X, Ma X, Lu X, Hou Y;  
PI  
XX WPI; 2004-553738/53.  
XX  
XX Series of recombinant adeno-associated viruses useful for inducing RNA  
PT interference pathway and for gene therapy in treating e.g. cancer,  
PT cardiovascular diseases, rheumatoid arthritis and angiogenic  
PT abnormalities.  
XX  
XX Example 8; SEQ ID NO 20; 53pp; Chinese.  
XX  
XX The invention relates to an adeno-associated virus (AAV) that carries a  
CC specific RNAi (RNA interference) nucleotide fragment comprising  
CC components of the outer shell of a recombinant AAV, a specific RNAi  
CC nucleotide fragment, and a control element for regulating the  
CC transcription and expression of the RNAi nucleotide fragment carried by  
CC encapsulation within the outer shell of a recombinant AAV. The  
CC recombinant viruses are useful for inducing RNAi pathway and gene therapy  
CC in treating e.g. cancer, cardiovascular diseases, immune diseases like  
CC rheumatoid arthritis and angiogenic abnormalities. This sequence  
CC corresponds to a short hairpin RNA (shRNA) oligonucleotide used in the  
CC invention.  
XX  
XX Sequence 21 BP; 4 A; 4 C; 8 G; 5 T; 0 U; 0 Other;  
SQ  
Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1.2e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 300 GAAGAGTGGGCTCTCTCAGC 320  
DB 1 GAAGAGTGGGCTCTCTCAGC 21  
RESULT 150  
ADQ94243  
ID ADQ94243 standard; DNA; 21 BP.  
XX  
XX ADQ94243;  
AC  
XX 21-OCT-2004 (first entry)  
XX  
XX Short hairpin RNA oligonucleotide SHRNA11.  
DE  
DE ss; antiarthritic; antirheumatic; cardiovascular; cytostatic;  
KW gene therapy; adeno-associated virus; RNAi; RNA interference;  
KW short interfering RNA; gene silencing; short hairpin RNA; cancer;  
KW cardiovascular disease; immune disease; rheumatoid arthritis;  
KW angiogenic abnormality.  
XX  
XX Synthetic.  
OS  
XX WO2004063380-A1.  
XX  
XX 29-JUL-2004.  
XX  
XX 07-NOV-2003; 2003WO-CN000939.  
XX

PR 07-NOV-2002; 2002CN-00149319.  
XX (AGTC-) AGTC GENE TECHNOLOGY CO LTD.  
PA Wu X, Dong X, Ma X, Lu X, Hou Y;  
XX WPI; 2004-553738/53.  
XX Series of recombinant adeno-associated viruses useful for inducing RNA  
PT interference pathway and for gene therapy in treating e.g. cancer,  
PT cardiovascular diseases, rheumatoid arthritis and angiogenic  
PT abnormalities.  
XX Example 8; SEQ ID NO 19; 53pp; Chinese.  
XX The invention relates to an adeno-associated virus (AAV) that carries a  
CC specific RNAi (RNA interference) nucleotide fragment comprising  
CC components of the outer shell of a recombinant AAV, a specific RNAi  
CC nucleotide fragment, and a control element for regulating the  
CC transcription and expression of the RNAi nucleotide fragment carried by  
CC encapsulation within the outer shell of a recombinant AAV. The  
CC recombinant viruses are useful for inducing RNAi pathway and gene therapy  
CC in treating e.g. cancer, cardiovascular diseases, immune diseases like  
CC rheumatoid arthritis and angiogenic abnormalities. This sequence  
CC corresponds to a short hairpin RNA (shRNA) oligonucleotide used in the  
CC invention.  
XX  
XX Sequence 21 BP; 3 A; 8 C; 3 G; 7 T; 0 U; 0 Other;  
SQ  
Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1.2e+02;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
OY 143 GCCTTCCACCGTTCATTCTAG 163  
DB 1 GCCTTCCACCGTTCATTCTAG 21  
RESULT 151  
ADT86999  
ID ADT86999 standard; RNA; 21 BP.  
XX  
AC ADT86999;  
XX  
XX 16-DEC-2004 (first entry)  
XX siRNA sequence used for RNA inhibition.  
XX  
XX ss; snRNA; small nuclear RNA; box H/ACA; mRNA splicing; mRNA processing;  
KW rRNA processing; RNA methylation site selection; pseudouridine formation;  
KW H/ACA-snoRNA; telomerase RNA; cancer; tumour; cell proliferation;  
KW trypanosome infection; RNAi-mediated degradation; neo gene; siRNA;  
KW small interfering RNA; TER; human; telomerase; RNAi; selection marker.  
XX  
XX Homo sapiens.  
XX  
XX WO2004069148-A2.  
XX  
XX 19-AUG-2004.  
XX  
XX 04-FEB-2004; 2004WO-IL000108.  
XX  
XX 04-FEB-2003; 2003US-0444670P.  
XX (UYBA-) UNIV BAR-ILAN.  
XX Michaeli S;  
XX  
XX WPI; 2004-604326/58.  
XX  
XX New isolated small nuclear RNA (snRNA) polynucleotides, useful for  
PT inducing RNAi-mediated degradation of snRNA or for treating diseases  
PT associated with activity of small nuclear RNA, e.g. cancer.

XX Disclosure; Page 24; 79pp; English.  
XX  
XX The present invention provides the method for downregulating snRNA  
CC (small nuclear RNA) molecules or the box H/ACA containing RNA molecules.  
CC The method can be used to treat the diseases associated with the activity  
CC of small nuclear RNA. Small nuclear RNA molecules are the important  
CC regulators of gene expression. They participate in mRNA splicing, mRNA  
CC and RNA processing, RNA methylation site selection and pseudouridine  
CC formation (box H/ACA-snoRNA). The telomerase RNA is an important nuclear  
CC RNA which serves as a template for telomerase replication. It contains  
CC box H/ACA like domain which confers the functional localisation of this  
CC RNA to the nucleus. The majority of the cancerous tumours contain active  
CC telomerase which contributes to cell proliferation. It has been found  
CC that the trypanosome infection is associated with the parasite's snRNA  
CC expression. The polynucleotides of the invention are useful for inducing  
CC RNAi-mediated degradation of a small nuclear RNA. They are useful for  
CC down regulating snRNA molecules or box H/ACA-containing RNA molecules.  
CC The telomerase activity of the cancer cells can be inhibited by a  
CC polynucleotide sequence which is capable of inducing RNAi mediated  
CC degradation of the human telomerase RNA. The snRNA-2 was found to be  
CC part of a gene cluster which includes two additional coding sequences of  
CC novel RNA termed as h2 and h3. It has also observed that the snRNA-2  
CC silencing occurs at the mature RNA transcript level and snRNA silencing  
CC results in decreased snRNA-2 guided methylation on the 5.8rRNA. The  
CC expression level of the snRNA-2 transcripts depend on the orientation of  
CC the snRNA-2 gene with respect to neo gene (selection marker). It has  
CC also found that the silencing of sno-RNA-2 is mediated through the  
CC production of siRNA (small interfering RNA) which can produce in both  
CC nucleus and cytoplasm. The invention suggests that the siRNA mediated  
CC snRNA-2 silencing is not unique to snRNA cluster-2. It is also  
CC applicable for mammalian snRNAs. The proposed nucleic acid construct  
CC comprises of a selection marker gene in reverse orientation. It also  
CC includes two promoters and each promoter is capable of directing the  
CC transcription of a specific strand of the nucleotide. The presented  
CC nucleotide sequence is the siRNA sequence which was used for snRNA  
CC inhibition.  
XX  
XX Sequence 21 BP; 7 A; 5 C; 5 G; 0 T; 4 U; 0 Other;  
SQ  
Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 81.0%; Pred. No. 1.2e+02;  
Matches 17; Conservative 4; Mismatches 0; Indels 0; Gaps 0;  
OY 44 GTCTAACCTTAACCTGAGAAGG 64  
DB 1 GUCUACCCUACUGAGAAGG 21  
RESULT 152  
AAT11035/c  
ID AAT11035 standard; DNA; 20 BP.  
XX  
AC AAT11035;  
XX  
XX 02-JUL-1996 (first entry)  
XX  
XX Antisense oligonucleotide (Tel-AU) inhibiting telomerase activity.  
XX  
XX Telomerase; mammal; antisense; triplex forming oligonucleotide; plasmid;  
KW probe; primer; ribozyme; ss.  
XX Synthetic.  
XX OS  
XX WO9601614-A2.  
XX  
XX 25-JAN-1996.  
XX  
XX 07-JUL-1995; 95WO-US008620.  
XX  
XX 07-JUL-1994; 94US-00272102.  
XX 27-OCT-1994; 94US-00330123.  
XX 13-FEB-1995; 95US-00387524.

PR 07-JUN-1995; 95US-00485778.  
 XX (COLD-) COLD SPRING HARBOR LAB.  
 PA (GERO-) GERON CORP.  
 XX  
 PI Andrews WH, Avillon AA, Feng J, Funk W, Greider C, Marhuenda MA;  
 PI Villeponteau B;  
 XX WPI; 1996-097428/10.  
 XX  
 XX RNA components of (non)human mammalian telomerase(s) - useful in studying  
 PT cell senescence and immortalisation.  
 PT  
 XX Disclosure; Page 23; 85pp; English.  
 PS  
 XX The RNA components of (non) human mammalian telomerase(s) especially from  
 CC mouse, rat and chinese hamster are all claimed. Antisense  
 CC oligonucleotides can be used to block the activity of the telomerase;  
 CC probes and primers can be used in detection; vectors and host cells  
 CC transformed with the isolated telomerase genes can be used for production  
 CC of telomerases; RNA and DNA ribozymes and triplex forming  
 CC oligonucleotides directed against the telomerase genes can be used  
 CC therapeutically as can plasmids. A mouse which lacks the telomerase gene  
 CC (also claimed) can be used for study of telomere regulation in vivo, and  
 CC the role it plays in immortalisation. The antisense oligonucleotide is  
 CC synthesised as a 2-O-methyl RNA oligonucleotide and is more resistant to  
 CC hydrolysis than unmodified RNA oligonucleotides (See AAT11032-35)  
 XX  
 SQ Sequence 20 BP; 4 A; 12 C; 3 G; 1 T; 0 U; 0 Other;  
 Query Match 4.4%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2 GGTTCGGAGGGTGGGCTG 21  
 |||||  
 DB 20 GGTTCGGAGGGTGGGCTG 1  
 RESULT 153  
 AAT11032/c  
 ID AAT11032 standard; DNA; 20 BP.  
 XX  
 AC AAT11032;  
 XX  
 XX 09-JUN-1996 (first entry)  
 DT  
 XX  
 XX Antisense oligonucleotide (T3) inhibiting telomerase activity.  
 DE  
 XX  
 KW Telomerase; mammal; antisense; triplex forming oligonucleotide; plasmid;  
 KW probe; primer; ribozyme; ss.  
 XX  
 XX Synthetic.  
 XX  
 XX WO9601614-A2.  
 PN  
 XX  
 XX 25-JAN-1996.  
 PD  
 XX  
 XX 07-JUL-1995; 95WO-US008620.  
 PF  
 XX  
 XX 07-JUL-1994; 94US-00272102.  
 PR 27-OCT-1994; 94US-00330123.  
 PR 13-FEB-1995; 95US-00387524.  
 PR 07-JUN-1995; 95US-00485778.  
 XX  
 XX (COLD-) COLD SPRING HARBOR LAB.  
 PA (GERO-) GERON CORP.  
 PA  
 XX Andrews WH, Avillon AA, Feng J, Funk W, Greider C, Marhuenda MA;  
 PI Villeponteau B;  
 XX WPI; 1996-097428/10.  
 DR  
 XX

PT RNA components of (non)human mammalian telomerase(s) - useful in studying  
 PT cell senescence and immortalisation.  
 XX  
 PS Disclosure; Page 23; 85pp; English.  
 XX  
 CC The RNA components of (non) human mammalian telomerase(s) especially from  
 CC mouse, rat and chinese hamster are all claimed. Antisense  
 CC oligonucleotides can be used to block the activity of the telomerase;  
 CC probes and primers can be used in detection; vectors and host cells  
 CC transformed with the isolated telomerase genes can be used for production  
 CC of telomerases; RNA and DNA ribozymes and triplex forming  
 CC oligonucleotides directed against the telomerase genes can be used  
 CC therapeutically as can plasmids. A mouse which lacks the telomerase gene  
 CC (also claimed) can be used for study of telomere regulation in vivo, and  
 CC the role it plays in immortalisation. The antisense oligonucleotide is  
 CC synthesised as a 2-O-methyl RNA oligonucleotide and is more resistant to  
 CC hydrolysis than unmodified RNA oligonucleotides (See AAT11032-35)  
 XX  
 SQ Sequence 20 BP; 7 A; 3 C; 5 G; 0 T; 5 U; 0 Other;  
 Query Match 4.4%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 41 TTTGTCTAACCCCTAACTGAG 60  
 |||||  
 DB 20 TTTGTCTAACCCCTAACTGAG 1  
 RESULT 154  
 AAT10286/c  
 ID AAT10286 standard; DNA; 20 BP.  
 XX  
 AC AAT10286;  
 XX  
 XX 09-SEP-1996 (first entry)  
 DT  
 XX  
 XX RNA component of mammalian telomerase antisense oligonucleotide T3.  
 DE  
 XX  
 KW RNA component; mammalian; telomerase; antisense oligonucleotide;  
 KW triple helix; inhibition; neoplastic; cells; activity; ss.  
 XX  
 XX Synthetic.  
 OS  
 XX WO9601835-A1.  
 PN  
 XX  
 XX 25-JAN-1996.  
 PD  
 XX  
 XX 06-JUL-1995; 95WO-US008530.  
 PF  
 XX  
 XX 07-JUL-1994; 94US-00272102.  
 PR 27-OCT-1994; 94US-00330123.  
 PR 07-JUN-1995; 95US-00472802.  
 PR 07-JUN-1995; 95US-00482115.  
 XX  
 XX (GERO-) GERON CORP.  
 PA  
 XX  
 XX Villeponteau B, Feng J, Funk W, Andrews WH;  
 PI WPI; 1996-097581/10.  
 XX  
 XX RNA component of mammalian telomerase, esp. human - useful in identifying  
 PT e.g. candidate telomerase-modulating agents.  
 PT  
 XX Disclosure; Page 38; 114pp; English.  
 PS  
 XX The present sequence is a RNA component of mammalian telomerase,  
 CC antisense oligonucleotide, which can be used, along with triple helix  
 CC forming sequences, to inhibit telomerase activity in cells, esp.  
 CC neoplastic cells  
 CC  
 XX Sequence 20 BP; 7 A; 3 C; 5 G; 5 T; 0 U; 0 Other;  
 SQ

Query Match 4.4%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 41 TTGTCTAACCTTAACCTGAG 60  
 DB 20 TTGTCTAACCTTAACCTGAG 1

RESULT 155  
 AAT10289/c  
 ID AAT10289 standard; DNA; 20 BP.  
 XX  
 AC AAT10289;  
 XX  
 DT 09-SEP-1996 (first entry)  
 XX  
 DE RNA component of mammalian telomerase antisense oligo Tel-AU.  
 XX  
 KW RNA component; mammalian; telomerase; antisense oligonucleotide;  
 KW triple helix; inhibition; neoplastic; cells; activity; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9601835-A1.  
 XX  
 PD 25-JAN-1996.  
 XX  
 PF 06-JUL-1995; 95WO-US008530.  
 XX  
 PR 07-JUL-1994; 94US-00272102.  
 PR 27-OCT-1994; 94US-00330123.  
 PR 07-JUN-1995; 95US-00472802.  
 PR 07-JUN-1995; 95US-00482115.  
 XX  
 PA (GERO-) GERON CORP.  
 XX  
 PI Villeponteau B, Feng J, Funk W, Andrews WH;  
 XX  
 DR WPI; 1996-097581/10.  
 XX  
 PT RNA component of mammalian telomerase, esp. human - useful in identifying  
 PT e.g. candidate telomerase-modulating agents.  
 XX  
 PS Disclosure; Page 38; 114pp; English.  
 XX  
 CC The present sequence is a RNA component of mammalian telomerase,  
 CC antisense oligonucleotide, which can be used, along with triple helix  
 CC forming sequences, to inhibit telomerase activity in cells, esp.  
 CC neoplastic cells  
 XX  
 SQ Sequence 20 BP; 4 A; 12 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 4.4%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GGTTCGGAGGCTGGCCCTG 21  
 DB 20 GGTTCGGAGGCTGGCCCTG 1

RESULT 156  
 AAV71226/c  
 ID AAV71226 standard; DNA; 20 BP.  
 XX  
 AC AAV71226;  
 XX  
 DT 15-FEB-1999 (first entry)  
 XX  
 DE Antisense oligonucleotide 14ab for human telomerase RNA component.  
 XX  
 KW Human; telomerase RNA component; anticancer therapy; purification; assay;

KW vaccine; cancer; antisense oligonucleotide; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1  
 FT /\*tag= a  
 FT /note= "biotinylated"  
 XX  
 PN WO9845450-A1.  
 XX  
 PD 15-OCT-1998.  
 XX  
 PF 04-APR-1997; 97WO-US006012.  
 XX  
 PR 04-APR-1997; 97WO-US006012.  
 XX  
 PA (GERO-) GERON CORP.  
 XX  
 PI Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;  
 PI Kealey JT;  
 XX  
 DR WPI; 1998-594485/50.  
 XX  
 PT Purification of telomerase on affinity material - useful for, e.g.  
 PT diagnosis and treatment of cancer.  
 XX  
 PS Claim 6; Page 61; 76pp; English.  
 XX  
 CC The present sequence represents an antisense oligonucleotide directed  
 CC against the human telomerase RNA component gene sequences. The  
 CC oligonucleotide can be used as an affinity agent in the methods of the  
 CC invention, which are used to purify human telomerase. The methods involve  
 CC the use of several sequential steps, including the use of two matrices  
 CC that bind molecules bearing negative charges, a matrix that binds  
 CC molecules bearing positive charges, an affinity purification step and a  
 CC size separation. Telomerase is a particular target of anticancer  
 CC therapies, and is useful in assays for characterizing (pre)cancerous  
 CC cells. Telomerase can also be used to screen for specific modulators, for  
 CC biochemical analysis of its activity, and in preparation of antibodies.  
 CC Fragments of telomerase, or nucleic acid encoding them, are used in  
 CC vaccines, and for treating over expression of telomerase, particularly in  
 CC cancer  
 XX  
 SQ Sequence 20 BP; 0 A; 9 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 4.4%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 361 AGCGCCGAGGAGGAGGACG 380  
 DB 20 AGCGCCGAGGAGGAGGACG 1

RESULT 157  
 AAV41173/c  
 ID AAV41173 standard; DNA; 20 BP.  
 XX  
 AC AAV41173;  
 XX  
 DT 08-OCT-1998 (first entry)  
 XX  
 DE RNA component of human telomerase (hTR) antisense oligo 16ab.  
 XX  
 KW RNA component; human telomerase; antisense oligonucleotide; infection;  
 KW neuroblastoma; bladder cancer; colon cancer; prostate cancer; cancer;  
 KW contraception; sterilization; immunosuppression; therapeutic; hTR;  
 KW immune system down-regulation; anti-inflammatory therapy; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.

XX	WO9828442-A1.
PN	
XX	02-JUL-1998.
PD	
XX	19-DEC-1997; 97WO-US023619.
PF	
XX	20-DEC-1996; 96US-00770564.
PR	
XX	20-DEC-1996; 96US-00770565.
XX	
PA	(GERO-) GERON CORP.
XX	
XX	Kim NW, Wu F, Kealey JT, Pruzan R, Weinrich SB;
PI	
XX	WPI; 1998-377676/32.
DR	
XX	New polynucleotide(s) anti:sense to human telomerase - used for detecting
PT	or inhibiting human telomerase, e.g. for treating cancers, contraception,
PT	immuno-suppression or treating infection.
PT	
XX	Claim 11; Page 65; 80pp; English.
PS	
XX	
CC	Sequences shown in AAV41169 to AAV41181 represent antisense
CC	oligonucleotides to the RNA component of human telomerase (hTR). These
CC	antisense oligonucleotides specifically hybridise to a nucleotide
CC	sequence within an accessible region of the hTR, but that does not
CC	hybridise to a sequence within the template region of hTR. These
CC	oligonucleotides may specifically be used for detection of an RNA
CC	component of human telomerase in a sample. This is useful for diagnosing
CC	cancer (especially neuroblastoma, bladder, colon and prostate cancer),
CC	and providing prognosis for a cancer patient. The inhibitory
CC	oligonucleotides can inhibit the telomerase activity level in a cell by
CC	interfering with transcription of the RNA component, decreasing the half-
CC	life of the telomerase RNA component transcript, inhibiting assembly of
CC	the RNA component into the telomerase holoenzyme, or inhibiting the
CC	polymerase activity of telomerase. These antisense oligonucleotides can
CC	be used for inhibiting telomerase activity in both cultured cells and in
CC	cells in vivo. They can be used in therapeutics for treating or
CC	preventing cancer, for contraception or sterilisation, for
CC	immunosuppression, and for selectively down-regulating specific branches
CC	of the immune system, e.g. a specific subset of T-cells, in anti-
CC	inflammatory therapies or for treating infections by, e.g. yeast,
CC	parasites or fungi
XX	
SQ	Sequence 20 BP; 5 A; 8 C; 3 G; 4 T; 0 U; 0 Other;
	Query Match 4.4%; Score 20; DB 1; Length 20;
	Best Local Similarity 100.0%; Pred.No. 1.3e+02;
	Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0
QY	300 GAAGAGTTGGGCTCTGTGAC 319
	20 GAAGAGTTGGGCTCTGTGAC 1
Db	
RESULT 158	
AAV41170/c	
ID	AAV41170 standard; DNA; 20 BP.
XX	
AC	AAV41170;
XX	
DT	08-OCT-1998 (first entry)
XX	
DE	RNA component of human telomerase (hTR) antisense oligo 14ab.
XX	
KW	RNA component; human telomerase; antisense oligonucleotide; infection;
KW	neuroblastoma; bladder cancer; colon cancer; prostate cancer; cancer;
KW	contraception; sterilisation; immunosuppression; therapeutic; hTR;
KW	immune system down-regulation; anti-inflammatory therapy; ss.
XX	
OS	Synthetic.
OS	Homo sapiens.
XX	

PN	WO9828442-A1.	
XX		
XX	02-JUL-1998.	
XX		
XX	19-DEC-1997; 97WO-US023619.	
XX		
XX	20-DEC-1996; 96US-00770564.	
PR	20-DEC-1996; 96US-00770565.	
FR		
XX	(GERO-) GERON CORP.	
XX		
XX	Kim NW, Wu F, Kealey JT, Pruzan R, Weinrich SL;	
XX		
XX	WPI; 1998-377670/32.	
DR		
XX		
XX	New polynucleotide(s) anti:sense to human telomerase - used for detecting	
PT	or inhibiting human telomerase, e.g. for treating cancers, contraception,	
PT	immuno-suppression or treating infection.	
XX		
XX		
PS	Claim 11; Page 65; 80pp; English.	
XX		
XX	Sequences shown in AAV41169 to AAV41181 represent antisense	
CC	oligonucleotides to the RNA component of human telomerase (hTR). These	
CC	antisense oligonucleotides specifically hybridise to a nucleotide	
CC	sequence within an accessible region of the hTR, but that does not	
CC	hybridise to a sequence within the template region of hTR. These	
CC	oligonucleotides may specifically be used for detection of an RNA	
CC	component of human telomerase in a sample. This is useful for diagnosing	
CC	cancer (especially neuroblastoma, bladder, colon and prostate cancer),	
CC	and providing prognosis for a cancer patient. The inhibitory	
CC	oligonucleotides can inhibit the telomerase activity level in a cell by	
CC	interfering with transcription of the RNA component, decreasing the half-	
CC	life of the telomerase RNA component transcript, inhibiting assembly of	
CC	the RNA component into the telomerase holoenzyme, or inhibiting the	
CC	polymerase activity of telomerase. These antisense oligonucleotides can	
CC	be used for inhibiting telomerase activity in both cultured cells and in	
CC	cells in vivo. They can be used in therapeutics for treating or	
CC	preventing cancer, for contraception or sterilisation, for	
CC	immunosuppression, and for selectively down-regulating specific branches	
CC	of the immune system, e.g. a specific subset of T-cells, in anti-	
CC	inflammatory therapies or for treating infections by, e.g. yeast,	
CC	parasites or fungi	
XX		
SQ	Sequence 20 BP; 0 A; 9 C; 4 G; 7 T; 0 U; 0 Other;	
	Query Match 4.4%; Score 20; DB 1; Length 20;	
	Best Local Similarity 100.0%; Pred. No. 1.3e+02;	
	Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0	
Oy	361 AGCGCCGAGGAAGGAACG 380	
Db	20 AGCGCCGAGGAAGGAACG 1	
RESULT 159		
AAV41174/C		
ID	AAV41174 standard; DNA; 20 BP.	
XX		
AC	AAV41174;	
XX		
DT	08-OCT-1998 (first entry)	
XX		
DE	RNA component of human telomerase (hTR) antisense oligo 16bc.	
XX		
KW	RNA component; human telomerase; antisense oligonucleotide; infection;	
KW	neuroblastoma; bladder cancer; colon cancer; prostate cancer; cancer;	
KW	contraception; sterilisation; immunosuppression; therapeutic; hTR;	
KW	immune system down-regulation; anti-inflammatory therapy; ss.	
XX		
OS	Synthetic.	
OS	Homo sapiens.	
XX		
PN	WO9828442-A1.	

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XX PD 02-JUL-1998.
XX PF 19-DEC-1997; 97WO-US023619.
XX PR 20-DEC-1996; 96US-00770564.
XX PR 20-DEC-1996; 96US-00770565.
XX PA (GERO-) GERON CORP.
XX PI Kim NW, Wu F, Kealey JT, Pruzan R, Weinrich SL;
XX WI; 1998-377670/32.
XX DR
XX PT New polynucleotide(s) anti-sense to human telomerase - used for detecting
XX PT or inhibiting human telomerase, e.g. for treating cancers, contraception,
XX PT immuno-suppression or treating infection.
XX PS
XX PS Claim 11; Page 65; 80pp; English.
XX CC
XX CC Sequences shown in AAV41169 to AAV41181 represent antisense
XX CC oligonucleotides to the RNA component of human telomerase (hTR). These
XX CC antisense oligonucleotides specifically hybridise to a nucleotide
XX CC sequence within an accessible region of the hTR, but that does not
XX CC hybridise to a sequence within the template region of hTR. These
XX CC oligonucleotides may specifically be used for detection of an RNA
XX CC component of human telomerase in a sample. This is useful for diagnosing
XX CC cancer (especially neuroblastoma, bladder, colon and prostate cancer),
XX CC and providing prognosis for a cancer patient. The inhibitory
XX CC oligonucleotides can inhibit the telomerase activity level in a cell by
XX CC interfering with transcription of the RNA component, decreasing the half-
XX CC life of the telomerase RNA component transcript, inhibiting assembly of
XX CC the RNA component into the telomerase holoenzyme, or inhibiting the
XX CC polymerase activity of telomerase. These antisense oligonucleotides can
XX CC be used for inhibiting telomerase activity in both cultured cells and in
XX CC cells in vivo. They can be used in therapeutics for treating or
XX CC preventing cancer, for contraception or sterilisation, for
XX CC immunosuppression, and for selectively down-regulating specific branches
XX CC of the immune system, e.g. a specific subset of T-cells, in anti-
XX CC inflammatory therapies or for treating infections by, e.g. yeast,
XX CC parasites or fungi.
XX SQ Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 290 CTGCCACCGGAGAGTTGG 309
Db 20 CTGCCACCGGAGAGTTGG 1

RESULT 160
AAV41180/C
ID AAV41180 standard; DNA; 20 BP.
XX AC
XX AC AAV41180;
XX DT 08-OCT-1998 (first entry)
XX DE
XX DE RNA component of human telomerase (hTR) antisense oligo 20/21.
XX KW RNA component; human telomerase; antisense oligonucleotide; infection;
XX KW neuroblastoma; bladder cancer; colon cancer; prostate cancer; cancer;
XX KW contraception; sterilisation; immunosuppression; therapeutic; hTR;
XX KW immune system down-regulation; anti-inflammatory therapy; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN W09828442-A1.
XX PN
XX PF

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PD 02-JUL-1998.
XX PF 19-DEC-1997; 97WO-US023619.
XX PR 20-DEC-1996; 96US-00770564.
XX PR 20-DEC-1996; 96US-00770565.
XX PA (GERO-) GERON CORP.
XX PI Kim NW, Wu F, Kealey JT, Pruzan R, Weinrich SL;
XX WI; 1998-377670/32.
XX DR
XX PT New polynucleotide(s) anti-sense to human telomerase - used for detecting
XX PT or inhibiting human telomerase, e.g. for treating cancers, contraception,
XX PT immuno-suppression or treating infection.
XX PS
XX PS Claim 11; Page 65; 80pp; English.
XX CC
XX CC Sequences shown in AAV41169 to AAV41181 represent antisense
XX CC oligonucleotides to the RNA component of human telomerase (hTR). These
XX CC antisense oligonucleotides specifically hybridise to a nucleotide
XX CC sequence within an accessible region of the hTR, but that does not
XX CC hybridise to a sequence within the template region of hTR. These
XX CC oligonucleotides may specifically be used for detection of an RNA
XX CC component of human telomerase in a sample. This is useful for diagnosing
XX CC cancer (especially neuroblastoma, bladder, colon and prostate cancer),
XX CC and providing prognosis for a cancer patient. The inhibitory
XX CC oligonucleotides can inhibit the telomerase activity level in a cell by
XX CC interfering with transcription of the RNA component, decreasing the half-
XX CC life of the telomerase RNA component transcript, inhibiting assembly of
XX CC the RNA component into the telomerase holoenzyme, or inhibiting the
XX CC polymerase activity of telomerase. These antisense oligonucleotides can
XX CC be used for inhibiting telomerase activity in both cultured cells and in
XX CC cells in vivo. They can be used in therapeutics for treating or
XX CC preventing cancer, for contraception or sterilisation, for
XX CC immunosuppression, and for selectively down-regulating specific branches
XX CC of the immune system, e.g. a specific subset of T-cells, in anti-
XX CC inflammatory therapies or for treating infections by, e.g. yeast,
XX CC parasites or fungi.
XX SQ Sequence 20 BP; 3 A; 3 C; 3 G; 11 T; 0 U; 0 Other;

Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 159 TCTAGAGCAACAAAAATG 178
Db 20 TCTAGAGCAACAAAAATG 1

RESULT 161
AAZ23632/C
ID AAZ23632 standard; DNA; 20 BP.
XX AC
XX AC AAZ23632;
XX DT 07-JAN-2000 (first entry)
XX DE
XX DE Human clone 28-1 telomerase oligonucleotide 14ab.
XX KW Telomerase; human; immune response; cancer; vaccine; treatment; disease;
XX KW primer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN US5968506-A.
XX PN
XX PN 19-OCT-1999.
XX PF 04-APR-1997; 97US-00833377.

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XX 04-AUG-1995; 95US-00510736.  
XX (GERO-) GERON CORP.  
XX Atkinson EM, Lichtsteiner SP, Weinrich SL, Pruzan RA, Kealey JT;  
XX Vasserot AP;  
XX WPI; 1999-590379/50.  
XX Compositions comprising human telomerase, useful for treating diseases  
XX associated with overexpression of telomerase e.g. cancer.  
XX PT  
XX Disclosure; Col 45-46; 34pp; English.  
XX This invention describes a novel composition comprising human telomerase  
XX having at least 2000-fold (preferably at least 6000-fold) increased  
XX relative purity compared with crude extract of cells from adenovirus-  
XX transformed kidney cell line. The composition is useful for eliciting an  
XX immune response in animals and may therefore be used as a vaccine for  
XX treating diseases associated with the overexpression of telomerase e.g.  
XX cancer. AA223626-223637 represent oligonucleotides used in the isolation  
XX of human clone 28-1 which contains a fragment of the human telomerase  
XX described in the method of the invention  
XX SQ Sequence 20 BP; 0 A; 9 C; 4 G; 7 T; 0 U; 0 Other;  
XX  
XX Query Match 4.4%; Score 20; DB 1; Length 20;  
XX Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
XX QY 361 AGGCCGCGAGGAGGAACG 380  
XX |||||  
XX DB 20 AGGCCGCGAGGAGGAACG 1  
XX  
XX RESULT 162  
XX AA223636/C  
XX ID AA223636 standard; DNA; 20 BP.  
XX AC AA223636;  
XX XX 07-JAN-2000 (first entry)  
XX XX Human clone 28-1 telomerase oligonucleotide oligo 14ab.  
XX XX Telomerase; human; immune response; cancer; vaccine; treatment; disease;  
XX KW primer; ss.  
XX OS Synthetic.  
XX OS Homo sapiens.  
XX XX Key Location/Qualifiers  
XX modified\_base 1  
XX FT /\*tag= a  
XX FT /note= "5'-biotinylated cytidine"  
XX XX  
XX XX US5968506-A.  
XX PD 19-OCT-1999.  
XX XX 04-APR-1997; 97US-00833377.  
XX XX 04-AUG-1995; 95US-00510736.  
XX PA (GERO-) GERON CORP.  
XX XX Atkinson EM, Lichtsteiner SP, Weinrich SL, Pruzan RA, Kealey JT;  
XX PI Vasserot AP;  
XX DR WPI; 1999-590379/50.  
XX XX Compositions comprising human telomerase, useful for treating diseases

PT associated with overexpression of telomerase e.g. cancer.  
XX Disclosure; Col 49-50; 34pp; English.  
XX This invention describes a novel composition comprising human telomerase  
XX having at least 2000-fold (preferably at least 6000-fold) increased  
XX relative purity compared with crude extract of cells from adenovirus-  
XX transformed kidney cell line. The composition is useful for eliciting an  
XX immune response in animals and may therefore be used as a vaccine for  
XX treating diseases associated with the overexpression of telomerase e.g.  
XX cancer. AA223626-223637 represent oligonucleotides used in the isolation  
XX of human clone 28-1 which contains a fragment of the human telomerase  
XX described in the method of the invention  
XX SQ Sequence 20 BP; 0 A; 9 C; 4 G; 7 T; 0 U; 0 Other;  
XX  
XX Query Match 4.4%; Score 20; DB 1; Length 20;  
XX Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
XX  
XX QY 361 AGGCCGCGAGGAGGAACG 380  
XX |||||  
XX DB 20 AGGCCGCGAGGAGGAACG 1  
XX  
XX RESULT 163  
XX AA207301  
XX ID AA207301 standard; DNA; 20 BP.  
XX AC AA207301;  
XX XX 22-OCT-1999 (first entry)  
XX XX Human telomerase RNA gene (hTR) promoter specific primer H1d.  
XX XX Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;  
XX KW gene therapy; thymidine kinase gene; anticancer therapy; human;  
XX KW mutagenesis; PCR primer; ss.  
XX OS Synthetic.  
XX OS Homo sapiens.  
XX XX WO9938964-A2.  
XX XX 05-AUG-1999.  
XX XX 29-JAN-1999; 99WO-GB000308.  
XX XX 29-JAN-1998; 98GB-00001902.  
XX XX (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.  
XX XX Keith WN;  
XX XX WPI; 1999-479183/40.  
XX XX Mouse and human telomerase RNA gene promoters, useful for tumor specific  
XX gene therapy.  
XX XX Disclosure; Fig 12; 109pp; English.  
XX XX The invention relates to promoter regions from mouse and human telomerase  
XX RNA (TR) component genes. The TR gene promoter can be linked to a  
XX heterologous gene, especially a gene encoding a cytotoxin, for therapy of  
XX cancer, especially neoplasias. The telomerase is necessary for the  
XX unrestricted proliferative capacity of many human cancers. Mutation or  
XX dysregulation of the telomerase repression pathway may cause reactivation  
XX or upregulation of telomerase expression in cancer. Substances,  
XX identified in the methods, can be used to block transcription from the TR  
XX gene promoter through interaction of the 5' regulatory sequences. These  
XX substances, e.g. antisense oligonucleotides, transcription factors, are  
XX peptide nucleic acids and factors that disrupt signal transduction, are  
XX useful for cancer therapy. In particular, gene therapy vectors



CC (especially pGT62-codAupp) comprising the promoter and a viral thymidine  
 CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that  
 CC neoplasia can be controlled or treated. Direct down-regulation of  
 CC telomerase RNA gene through manipulation of transcription factors may be  
 CC effective anticancer therapy and the cloning of the hTR gene promoter  
 CC allows the analysis of therapeutic molecules which modulate hTR promoter  
 CC activity. Sequences AA207656-321 represent PCR primers used in cloning  
 CC and mutagenesis of human TR gene (hTR) promoter region  
 XX  
 SQ Sequence 20 BP; 1 A; 4 C; 12 G; 3 T; 0 U; 0 Other;  
 Query Match 4.4%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 17 GCCTGGGAGGGTGGTGGCC 36  
 Db 1 GCCTGGGAGGGTGGTGGCC 20  
 RESULT 164  
 AA207275  
 ID AA207275 standard; DNA; 20 BP.  
 XX  
 AC AA207275;  
 XX  
 DT 22-OCT-1999 (first entry)  
 XX  
 DE Human telomerase RNA gene (hTR) specific primer hTRe.  
 XX  
 KW Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;  
 KW gene therapy; thymidine kinase gene; anticancer therapy; human;  
 KW PCR primer; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 FN WO9938964-A2.  
 XX  
 PD 05-AUG-1999.  
 XX  
 XX 29-JAN-1999; 99WO-GB000308.  
 PF  
 XX 29-JAN-1998; 98GB-00001902.  
 PR  
 XX (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.  
 PA  
 XX Keith WN;  
 PI  
 XX WPI; 1999-479183/40.  
 DR  
 XX Mouse and human telomerase RNA gene promoters, useful for tumor specific  
 PT gene therapy.  
 XX  
 XX Disclosure; Fig 6; 109pp; English.  
 FS  
 XX The invention relates to promoter regions from mouse and human telomerase  
 CC RNA (TR) component genes. The TR gene promoter can be linked to a  
 CC heterologous gene, especially a gene encoding a cytotoxin, for therapy of  
 CC cancer, especially neoplasias. The telomerase is necessary for the  
 CC unrestricted proliferative capacity of many human cancers. Mutation or  
 CC dysregulation of the telomerase repression pathway may cause reactivation  
 CC or upregulation of telomerase expression in cancer. Substances,  
 CC identified in the methods, can be used to block transcription from the TR  
 CC gene promoter through interaction of the 5' regulatory sequences. These  
 CC substances, e.g. antisense oligonucleotides, transcription factors, are  
 CC peptide nucleic acids and factors that disrupt signal transduction, are  
 CC useful for cancer therapy. In particular, gene therapy vectors  
 CC (especially pGT62-codAupp) comprising the promoter and a viral thymidine  
 CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that  
 CC neoplasia can be controlled or treated. Direct down-regulation of  
 CC telomerase RNA gene through manipulation of transcription factors may be  
 CC effective anticancer therapy and the cloning of the hTR gene promoter

CC allows the analysis of therapeutic molecules which modulate hTR promoter  
 CC activity. Sequences AA207623-80 represents PCR primers for amplifying  
 CC human TR gene (hTR) promoter sequence  
 XX  
 SQ Sequence 20 BP; 3 A; 5 C; 8 G; 4 T; 0 U; 0 Other;  
 Query Match 4.4%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 410 CTGAGCTGTGGACGTGCAC 429  
 Db 1 CTGAGCTGTGGACGTGCAC 20  
 RESULT 165  
 AAA37583/c  
 ID AAA37583 standard; DNA; 20 BP.  
 XX  
 AC AAA37583;  
 XX  
 DT 15-AUG-2000 (first entry)  
 XX  
 DE PNA sequence #41 used to inhibit telomerase activity.  
 XX  
 KW Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;  
 KW inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;  
 KW AIDS; HIV; fungal infection; forensic identification; detect; tumour;  
 KW paternity testing; ss.  
 XX  
 OS Synthetic.  
 OS  
 FH Key Location/Qualifiers  
 FT misc\_feature 1..20  
 FT /\*tag= a  
 FT /notes= "Peptide nucleic acid molecule, where N-(2-  
 FT aminoethyl)glycine units are linked to nucleotide bases  
 FT via glycine amino N through a methylenecarbonyl linker"  
 XX  
 FN US046307-A.  
 PD 04-APR-2000.  
 XX  
 PF 09-APR-1997; 97US-00838545.  
 XX  
 PR 09-APR-1996; 96US-00630019.  
 XX  
 XX (TEXA ) UNIV TEXAS SYSTEM.  
 PA  
 XX Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;  
 PI WPI; 2000-292432/25.  
 XX  
 DR New peptide nucleic acid (PNA) compounds that inhibit telomerase activity  
 PT in mammalian cells is useful as probes to detect the RNA component of a  
 PT mammalian telomerase.  
 XX  
 XX Example 1; Col 27-28; 45pp; English.  
 PS  
 XX The present sequence represents a peptide nucleic acid molecule which  
 CC hybridises to the mRNA component of mammalian telomerase, and inhibits  
 CC telomerase activity. Telomerase is a ribonucleoprotein enzyme that  
 CC synthesizes one strand of the telomeric DNA, using as a template an 11  
 CC nucleotide sequence contained within the RNA component of the enzyme. The  
 CC invention relates to PNA molecules having a sequence of no more than 25  
 CC bases, which include the sequence GTTAGG. The uncharged nature of the PNA  
 CC backbone increases the melting temperature of associating strands,  
 CC increases the rate of association with targeted nucleic acids, and  
 CC affords greater resistance of degradation by proteases or nucleases. The  
 CC therapeutic PNAs may be used for treating disease conditions such as  
 CC cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human  
 CC immunodeficiency virus (HIV) infection/AIDS (acquired immunodeficiency  
 CC syndrome) and associated pathologies, fungal infections, and other

CC diseases characterized by abnormal telomere metabolism or telomerase  
CC activity, in combination with antineoplastic and other cytotoxic or  
CC cytosstatic agents, antifungal agents, and other nucleotides. PNAs may be  
CC used for molecular diagnostics, labelled PNAs are used as hybridization  
CC probes to detect or quantitate polynucleotides having a human telomerase  
CC RNA (hTR) sequence. PNA probes are also used for forensic identification  
CC of individuals, e.g. paternity testing, based on hTR gene restriction  
CC fragment length polymorphism (RFLP) pattern. PNAs are also useful as  
CC probes to detect the RNA component of a mammalian telomerase and as  
CC inhibitors of telomerase activity. The method of the present invention  
CC allows cancerous conditions to be detected with increased confidence and  
CC possibly at an earlier stage, before cells are detected as cancerous  
CC based on pathological characteristics. The diagnostic and prognostic  
CC methods of the present invention can be used to detect an immortal or  
CC neoplastic cell or tumour tissue or cancer of any origin, provided the  
CC cell expresses telomerase activity and its RNA component  
XX  
SQ Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;  
  
Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 46 CTAACCCCTAACTGAGAAGGG 65  
Db 20 CTAACCCCTAACTGAGAAGGG 1  
  
RESULT 166  
AAS15454/c  
ID AAS15454 standard; DNA; 20 BP.  
XX  
AC AAS15454;  
XX  
DT 14-FEB-2002 (first entry)  
XX  
DE PNA VIII inhibiting human and mammalian telomerase activity.  
XX  
KW Mammalian; peptide nucleic acid; probe; forensic; paternity testing;  
KW human telomerase RNA component; hTR gene RFLP pattern; cancer;  
KW inflammation; lymphoproliferative disease; autoimmune disease;  
KW neurodegenerative disease; neoplasia; hyperplasia; HIV; AIDS;  
KW human immunodeficiency virus; acquired immunodeficiency syndrome;  
KW telomere metabolism; mutant; cytostatic; anti-inflammatory;  
KW immunosuppressive; polyamide backbone; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /note= "This sequence is a peptide nucleic acid, i.e. it  
FT contains a polyamide backbone instead of a deoxyribose  
FT backbone"  
XX  
XX  
XX US6294650-B1.  
XX  
XX 25-SEP-2001.  
XX  
XX 08-JUL-1999; 99US-00349532.  
XX  
XX 09-APR-1996; 96US-00630019.  
XX 09-APR-1997; 97US-00838545.  
XX  
XX (TEXA ) UNIV TEXAS SYSTEM.  
XX  
XX Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;  
XX WPI; 2001-638024/73.  
XX  
XX New peptide nucleic acids that hybridizes to the RNA component of  
XX mammalian telomerase, useful for treating or preventing cancer,  
PT

PT inflammation, lymphoproliferative diseases, autoimmune disease, or  
PT neurodegenerative diseases.  
XX  
XX Example 1; Col 29; 46pp; English.  
XX  
CC The present invention relates to peptide nucleic acids (PNAs), comprising  
CC a sequence of 6-25 nucleobases, that inhibit telomerase activity in  
CC mammalian cells by hybridising to the RNA component of mammalian  
CC telomerase. The PNAs are useful as probes to detect the RNA component of  
CC mammalian telomerase and as inhibitors of telomerase activity, or to  
CC detect and/or quantitate polynucleotide having the human telomerase RNA  
CC component (hTR) sequence, as well as in forensic identification of  
CC individuals, such as paternity testing or identification of criminal  
CC suspects or unknown descendants based on the hTR gene RFLP pattern. The  
CC PNA can be further used for treating or preventing cancer, inflammation,  
CC lymphoproliferative diseases, autoimmune disease, or neurodegenerative  
CC diseases. The PNAs in combination with other pharmaceuticals (such as  
CC antineoplastic or cytostatic agents) can be used for treating neoplasia,  
CC hyperplasia, human immunodeficiency virus (HIV) infections, acquired  
CC immunodeficiency syndrome (AIDS) and associated pathologies, and other  
CC diseases characterised by abnormal telomere metabolism or telomerase  
CC activity. The present sequence represents one of the PNA sequences of the  
CC invention  
XX  
SQ Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;  
  
Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 46 CTAACCCCTAACTGAGAAGGG 65  
Db 20 CTAACCCCTAACTGAGAAGGG 1  
  
RESULT 167  
AAS15934/c  
ID AAS15934 standard; DNA; 20 BP.  
XX  
AC AAS15934;  
XX  
DT 27-FEB-2002 (first entry)  
XX  
DE Human telomerase polynucleotide inhibitor #15.  
XX  
KW Human; telomerase; hTR; cytostatic; anti-inflammatory; adenocarcinoma;  
KW breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease;  
KW fertility; inflammatory condition; tumour; cancer; veterinary;  
KW immunosuppression; telomerase inhibitor; ss.  
XX  
XX Homo sapiens.  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..20  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "N3'-p5' phosphoramidate linkages"  
XX  
XX WO200174136-A2.  
XX  
XX 11-OCT-2001.  
XX  
XX 30-MAR-2001; 2001WO-US010476.  
XX  
XX 31-MAR-2000; 2000US-00540119.  
XX  
XX (GERO-) GERON CORP.  
XX  
XX Gryaznov SM, Pruzan R, Weinrich SL;  
XX WPI; 2001-656955/75.  
XX  
XX

PT New polynucleotide useful for inhibiting telomerase activity in cells, or  
 PT for treating telomerase-mediated condition or disease, such as cancers,  
 PT tumors, Hodgkin's disease, or inflammatory conditions.

XX Claim 8; Page 36; 48pp; English.

CC The invention relates to polynucleotide inhibitors (I) and methods for  
 CC inhibiting telomerase activity. (I) are useful in inhibiting telomerase  
 CC activity and proliferation of a telomerase positive cell, and in  
 CC manufacturing a medicament for inhibiting telomerase activity in a cell  
 CC and in treating telomerase-mediated condition or disease, such as  
 CC adenocarcinoma of breast, prostate or colon, mixed cell leukaemia,  
 CC Hodgkin's disease, fertility and inflammatory conditions. (I) are also  
 CC useful in treating a tumour or in manufacturing a medicament for the  
 CC treatment of tumour. The polynucleotide inhibitors may also be used in  
 CC diagnostic assays for detecting RNA or DNA. Inhibition of telomerase  
 CC activity in cells in vivo is useful in prophylactic and therapeutic  
 CC methods of treating cancer and other disorders involving inappropriate  
 CC expression of telomerase, and in treating veterinary proliferative  
 CC diseases. Inhibition of telomerase in haematopoietic stem cells is useful  
 CC for immunosuppression and for selectively down-regulating specific  
 CC branches of the immune system. The present sequence represents human  
 CC telomerase polynucleotide inhibitor #15, as described in the method of  
 CC the invention

XX SQ Sequence 20 BP; 3 A; 3 C; 3 G; 11 T; 0 U; 0 Other;

Query Match 4.4%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 160 CTAGAGCAACAAAAATGT 179  
 Db 20 CTAGAGCAACAAAAATGT 1

RESULT 168

AAS09477/C  
 ID AAS09477 standard; DNA; 20 BP.

AC AAS09477;

XX 24-OCT-2001 (first entry)

DE Antisense oligonucleotide for human telomerase, Oligo 14ab #1.  
 XX Human; Telomerase; vaccine; antibody; cancer; EF2H; nucleolin;  
 KW antisense oligonucleotide; Oligo 14ab; ss.

XX Homo sapiens.

XX US6261556-B1.

XX 17-JUL-2001.

XX 18-OCT-1999; 99US-00420056.

XX 04-AUG-1995; 95US-00510736.

XX 04-APR-1997; 97US-00833377.

XX (GERO-) GERON CORP.

XX Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;

XX Kealey JT;

XX WPI; 2001-450477/48.

XX Purified human telomerase, useful for inducing immune response in  
 PT animals, comprises several thousand folds increased purity compared with  
 PT cytoplasmic crude cell preparations.

XX Disclosure; Col 2; 29pp; English.

XX

CC The sequence represents an antisense oligonucleotide used in the  
 CC purification of human telomerase. The invention relates to a purified  
 CC human telomerase core enzyme protein comprising 2000-fold increased  
 CC purity compared with a crude extract of cells from adenovirus-transformed  
 CC kidney cell line (293 cells) and when associated with telomerase RNA  
 CC component has DNA polymerase activity and a molecular weight of 200-2000  
 CC kilo daltons (kDa). The purified telomerase is useful for inducing a  
 CC humoral or cell-mediated immune response in an animal. Purified  
 CC telomerase or immunogenic fragments are useful as vaccines for treating  
 CC diseases associated with over-expression of telomerase, such as cancer  
 CC and for producing antibodies that recognize telomerase, which are useful  
 CC as affinity agents in isolating the proteins and for detecting the  
 CC presence of proteins in a sample, such as cell or tissue. Identification  
 CC of telomerase aids in diagnosis of cancer or pre-cancerous states.  
 CC Telomerase and/or telomerase associated proteins are also useful for  
 CC screening compounds to identify agents that alter the association of  
 CC telomerase-associated proteins, such as nucleolin or EF2H with telomerase

XX SQ Sequence 20 BP; 0 A; 9 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 4.4%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 361 AGCGCGCAGGAAGGGAACG 380  
 Db 20 AGCGCGCAGGAAGGGAACG 1

RESULT 169

AAS09480/C  
 ID AAS09480 standard; DNA; 20 BP.

XX AC AAS09480;

XX 24-OCT-2001 (first entry)

DE Antisense oligonucleotide for human telomerase, Oligo 14ab #2.  
 XX Human; Telomerase; vaccine; antibody; cancer; EF2H; nucleolin;  
 KW antisense oligonucleotide; Oligo 14ab; ss.

XX Homo sapiens.

XX Key Location/Qualifiers

FT modified\_base 1 /\*tag= a  
 FT /mod\_base= C  
 FT /note= "C is biotinylated"

XX US6261556-B1.

XX 17-JUL-2001.

XX 18-OCT-1999; 99US-00420056.

XX 04-AUG-1995; 95US-00510736.

XX 04-APR-1997; 97US-00833377.

XX (GERO-) GERON CORP.

XX Weinrich SL, Atkinson EM, Lichtsteiner SP, Vasserot AP, Pruzan RA;

XX Kealey JT;

XX WPI; 2001-450477/48.

XX Purified human telomerase, useful for inducing immune response in  
 PT animals, comprises several thousand folds increased purity compared with  
 PT cytoplasmic crude cell preparations.

XX Disclosure; Col 18; 29pp; English.

XX The sequence represents a biotinylated antisense oligonucleotide used in

CC the purification of human telomerase. The invention relates to a purified  
 CC human telomerase core enzyme protein comprising 2000-fold increased  
 CC purity compared with a crude extract of cells from adenovirus-transformed  
 CC kidney cell line (293 cells) and when associated with telomerase RNA  
 CC component has DNA polymerase activity and a molecular weight of 200-2000  
 CC kilo Daltons (kDa). The purified telomerase is useful for inducing a  
 CC humoral or cell-mediated immune response in an animal. Purified  
 CC telomerase or immunogenic fragments are useful as vaccines for treating  
 CC diseases associated with over-expression of telomerase, which are useful  
 CC and for producing antibodies that recognize telomerase, which are useful  
 CC as affinity agents in isolating the proteins and for detecting the  
 CC presence of proteins in a sample, such as cell or tissue. Identification  
 CC of telomerase aids in diagnosis of cancer or pre-cancerous states.  
 CC Telomerase and/or telomerase associated proteins are also useful for  
 CC screening compounds to identify agents that alter the association of  
 CC telomerase-associated proteins, such as nucleolin or EPH with telomerase  
 XX  
 SQ Sequence 20 BP; 0 A; 9 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 4.4%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 361 AGCCCGCAGGAGGGAACG 380  
 |||||  
 Db 20 AGCCCGCAGGAGGGAACG 1

RESULT 170

AAC64999  
 ID AAC64999 standard; DNA; 20 BP.

AC AAC64999;

XX 23-MAR-2001 (first entry)

DT Human telomerase PCR primer #2.

DE Telomerase; cancer; telomere damage; PCR primer; ss.

KW Homo sapiens.

XX WO200074667-A2.

XX 14-DEC-2000.

XX 05-JUN-2000; 2000WO-US015544.

XX 04-JUN-1999; 99US-0137549P.

XX (AUJL/) AU J L.

XX (WIEN/) WIEN/TJES G.

XX Au JL, Wientjes G;

XX WPI; 2001-071022/08.

DR Inhibiting or reducing growth of cell for treating cancer, comprising  
 PT administering telomere damage-inducing agent and telomerase inhibitory  
 PT agent to the cell.

XX Example 7; Page 62; 97pp; English.

PS The present invention provides a method for inhibiting or reducing the  
 CC growth of a cell which involves administering to the cell a telomere  
 CC damage inducing agent and a telomerase inhibitory agent. This can be used  
 CC in the treatment of aberrant cell growth, including cancers

XX Sequence 20 BP; 1 A; 3 C; 12 G; 4 T; 0 U; 0 Other;

Query Match 4.4%; Score 20; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GGGTTGGGAGGGTGGGCGCT 20  
 |||||  
 Db 1 GGGTTGGGAGGGTGGGCGCT 20

RESULT 171

AAV68462/c

ID AAV68462 standard; DNA; 19 BP.

XX AAV68462;

XX 22-MAR-1999 (first entry)

DE Human telomerase RNA (hTR) component antisense oligonucleotide.

XX Human; telomerase; hTR; activator-antisense complex; malignant; enzyme;  
 KW cleave; brain; tumour malignant glioma; breast tumour; renal cell cancer;  
 KW melanoma; prostate cancer; leukemia; polycythemia vera; myeloma; sarcoma;  
 KW Hodgkin's lymphoma; Waldenstrom's macroglobulinemia; heavy chain disease;  
 KW carcinoma; chemotherapeutic; antisense; ss.

OS Synthetic.

XX Homo sapiens.

XX WO9847911-A1.

XX 29-OCT-1998.

XX 13-APR-1998; 98WO-US007397.

XX 21-APR-1997; 97US-0044507P.

XX 03-FEB-1998; 98US-00018125.

XX (CLEV-) CLEVELAND CLINIC FOUND.

XX (USSH ) US NAT INST OF HEALTH.

XX Silverman RH, Kondo S, Cowell JK, Li G, Torrence PF;

XX WPI; 1998-609972/51.

XX New RNase L activator-telomerase antisense complex - useful to inhibit

XX telomerase activity in telomerase-expressing malignancies.

XX Claim 4; Page 54; 81pp; English.

XX This represents an antisense oligonucleotide to the RNA component of  
 CC human telomerase (hTR). The invention relates to an activator-antisense  
 CC complex that comprises: (a) an antisense oligonucleotide, complementary  
 CC to a 12-25 nucleotide portion of hTR, with a hydroxyl moiety at the first  
 CC end; and (b) a linker attached to the first end, and (c) an activator of  
 CC RNase L attached to the linker. The activator-antisense complex may be  
 CC used for inhibiting the growth of a telomerase-expressing malignant cell  
 CC or tumour. The complex is used to specifically cleave the ribonucleotide  
 CC portion of a telomerase enzyme. The complex inhibits growth of telomerase  
 CC expressing malignant cells from brain tumour malignant glioma, breast  
 CC tumour, renal cell cancer, melanoma, and prostate cancer. Many other  
 CC malignancies and related disorders, may be treated including various  
 CC acute and chronic leukemias, polycythemia vera, Hodgkin's and non-  
 CC Hodgkin's lymphomas, multiple myeloma, Waldenstrom's macroglobulinemia,  
 CC heavy chain disease, and solid tumours, including numerous sarcomas and  
 CC carcinomas. The complex is preferably administered in combination with a  
 CC chemotherapeutic agent, particularly either cisplatin, doxorubicin,  
 CC mitomycin, daunorubicin, bleomycin, actinomycin D, or neocarzinostatin

XX Sequence 19 BP; 6 A; 5 C; 8 G; 0 T; 0 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 76 GTGCTTTTGTCTCCCGCGC 94  
 |||||

Db 19 GTGCTTTTGCTCCCGCGC 1

RESULT 172  
AAV41176/C  
ID AAV41176 standard; DNA; 19 BP.  
XX  
AC AAV41176;  
XX  
DT 08-OCT-1998 (first entry)  
XX  
DE RNA component of human telomerase (hTR) antisense oligo 21ab.  
XX  
KW RNA component; human telomerase; antisense oligonucleotide; infection;  
KW neuroblastoma; bladder cancer; colon cancer; prostate cancer; cancer;  
KW contraception; sterilisation; immunosuppression; therapeutic; hTR;  
KW immune system down-regulation; anti-inflammatory therapy; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
PN WO9828442-A1.  
XX  
PD 02-JUL-1998.  
XX  
PF 19-DEC-1997; 97WO-US023619.  
XX  
PR 20-DEC-1996; 96US-00770564.  
PR 20-DEC-1996; 96US-00770565.  
XX  
PA (GERO-) GERON CORP.  
XX  
PI Kim NW, Wu F, Kealey JT, Pruzan R, Weinrich SL;  
XX  
DR WPI; 1998-377670/32.  
XX  
PT New polynucleotide(s) anti-sense to human telomerase - used for detecting  
PT or inhibiting human telomerase, e.g. for treating cancers, contraception,  
PT immuno-suppression or treating infection.  
XX  
PS Claim 11; Page 65; 80pp; English.  
XX  
CC Sequences shown in AAV41169 to AAV41181 represent antisense  
CC oligonucleotides to the RNA component of human telomerase (hTR). These  
CC antisense oligonucleotides specifically hybridise to a nucleotide  
CC sequence within an accessible region of the hTR, but that does not  
CC hybridise to a sequence within the template region of hTR. These  
CC oligonucleotides may specifically be used for detection of an RNA  
CC component of human telomerase in a sample. This is useful for diagnosing  
CC cancer (especially neuroblastoma, bladder, colon and prostate cancer),  
CC and providing prognosis for a cancer patient. The inhibitory  
CC oligonucleotides can inhibit the telomerase activity level in a cell by  
CC interfering with transcription of the RNA component, decreasing the half-  
CC life of the telomerase RNA component transcript, inhibiting assembly of  
CC the RNA component into the telomerase holoenzyme, or inhibiting the  
CC polymerase activity of telomerase. These antisense oligonucleotides can  
CC be used for inhibiting telomerase activity in both cultured cells and in  
CC cells in vivo. They can be used in therapeutics for treating or  
CC preventing cancer, for contraception or sterilisation, for  
CC immunosuppression, and for selectively down-regulating specific branches  
CC of the immune system, e.g. a specific subset of T-cells, in anti-  
CC inflammatory therapies or for treating infections by, e.g. yeast,  
CC parasites or fungi  
XX  
SQ Sequence 19 BP; 5 A; 3 C; 7 G; 4 T; 0 U; 0 Other;  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 148 CCACGGTTCATTCTAGAC 166  
|||||  
19 CCACGGTTCATTCTAGAC 1  
Db

RESULT 173  
AAA37602  
ID AAA37602 standard; RNA; 19 BP.  
XX  
AC AAA37602;  
XX  
DT 15-AUG-2000 (first entry)  
XX  
DE Telomerase target sequence.  
XX  
KW Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;  
KW inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;  
KW AIDS; HIV; fungal infection; forensic identification; detect; tumour;  
KW paternity testing; ss.  
XX  
OS Synthetic.  
XX  
PN US6046307-A.  
XX  
PD 04-APR-2000.  
XX  
PF 09-APR-1997; 97US-00838545.  
XX  
PR 09-APR-1996; 96US-00630019.  
XX  
PA (TEXA ) UNIV TEXAS SYSTEM.  
XX  
PI Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;  
XX  
DR WPI; 2000-292432/25.  
XX  
PT New peptide nucleic acid (PNA) compounds that inhibit telomerase activity  
PT in mammalian cells is useful as probes to detect the RNA component of a  
PT mammalian telomerase.  
XX  
PS Example 2; Col 37; 45pp; English.  
XX  
CC The present sequence represents a telomerase target sequence. The  
CC invention relates to an antisense oligonucleotide used as a control  
CC sequence alongside a peptide nucleic acid molecule which hybridises to  
CC the mRNA component of mammalian telomerase, and inhibits telomerase  
CC activity. Telomerase is a ribonucleoprotein enzyme that synthesizes one  
CC strand of the telomeric DNA, using as a template an 11 nucleotide  
CC sequence contained within the RNA component of the enzyme. The invention  
CC relates to PNA molecules having a sequence of no more than 25 bases,  
CC which include the sequence GTTAGG. The uncharged nature of the PNA  
CC backbone increases the melting temperature of associating strands,  
CC increases the rate of association with targeted nucleic acids, and  
CC affords greater resistance of degradation by proteases or nucleases. The  
CC therapeutic PNAs may be used for treating disease conditions such as  
CC cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human  
CC immunodeficiency virus (HIV) infection/AIDS (acquired immunodeficiency  
CC syndrome) and associated pathologies, fungal infections, and other  
CC diseases characterized by abnormal telomere metabolism or telomerase  
CC activity, in combination with antineoplastic and other cytotoxic or  
CC cytostatic agents, antifungal agents, and other nucleotides. PNAs may be  
CC used for molecular diagnostics, labelled PNAs are used as hybridization  
CC probes to detect or quantitate polynucleotides having a human telomerase  
CC RNA (hTR) sequence. PNA probes are also used for forensic identification  
CC of individuals, e.g. paternity testing, based on hTR gene restriction  
CC fragment length polymorphism (RFLP) pattern. PNAs are also useful as  
CC probes to detect the RNA component of a mammalian telomerase and as  
CC inhibitors of telomerase activity. The method of the present invention  
CC allows cancerous conditions to be detected with increased confidence and  
CC possibly at an earlier stage, before cells are detected as cancerous  
CC based on pathological characteristics. The diagnostic and prognostic  
CC methods of the present invention can be used to detect an immortal or  
CC neoplastic cell or tumour tissue or cancer of any origin, provided the  
CC cell expresses telomerase activity and its RNA component  
XX  
SQ Sequence 19 BP; 7 A; 5 C; 3 G; 0 T; 4 U; 0 Other;





CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siRNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents the upper strand of a human TERC-targeted double-stranded  
 CC siRNA, which is identical to the c-fos transcript target sequence.  
 XX

SQ Sequence 19 BP; 0 A; 7 C; 9 G; 0 T; 3 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;  
 Best Local Similarity 84.2%; Pred. No. 1.5e+02;  
 Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 320 CCGCGGGTCTCCGGGGC 338

Db 1 CCGCGGGUCUCUGGGGGC 19

RESULT 178

ID ADF93312 standard; RNA; 19 BP.

XX ADF93312;

DT 26-FEB-2004 (first entry)

DE Human TERC transcript target sequence/siRNA upper strand, SEQ ID 29.

XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
 KW RNA interference; short interfering nucleic acid; siRNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.

XX Homo sapiens.

XX WO2003070742-A1.

PD 28-AUG-2003.

XX 11-FEB-2003; 2003WO-US004088.

PF 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 17-JUL-2002; 2002US-0396600P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Beigelman L;

XX WPI; 2003-689777/65.

PT New short interfering nucleic acid downregulates expression of the  
 PT telomerase gene useful e.g. for treatment and diagnosis of cancer.

PS Example 3; SEQ ID NO 29; 145pp; English.

XX The invention relates to short interfering nucleic acids (siRNA) which  
 CC downregulate expression of the one or more telomerase genes by RNA  
 CC interference. The siRNAs may or may not comprise ribonucleotides and may  
 CC be double or single stranded. They further comprise sense and antisense

CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siRNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siRNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesized,  
 CC expressed from a vector or enzymatically synthesized. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siRNA; conjugates  
 CC and/or complexes of siRNA; and vectors that express siRNA. The siRNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siRNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents the upper strand of a human TERC-targeted double-stranded  
 CC siRNA, which is identical to the c-fos transcript target sequence.  
 XX

SQ Sequence 19 BP; 3 A; 4 C; 8 G; 0 T; 4 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;

Best Local Similarity 78.9%; Pred. No. 1.5e+02;

Matches 15; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 410 CTGAGCTGTGGGACGTGCA 428

Db 1 CUGAGCUGGGGACGUGCA 19

DE Human TERC siRNA lower strand, SEQ ID 287.

XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;

XX neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;

XX ID ADF93560 standard; RNA; 19 BP.

XX ADF93560;

XX ADF93560;

DT 26-FEB-2004 (first entry)

DE Human TERC siRNA lower strand, SEQ ID 287.

XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
 KW RNA interference; short interfering nucleic acid; siRNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.

XX Homo sapiens.

XX WO2003070742-A1.

XX 28-AUG-2003.

XX 11-FEB-2003; 2003WO-US004088.

XX 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 17-JUL-2002; 2002US-0396600P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Beigelman L;

XX WPI; 2003-689777/65.



XX New short interfering nucleic acid downregulates expression of the  
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX Example 3; SEQ ID NO 287; 145pp; English.  
XX The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the one or more telomerase genes by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of the telomerase genes in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, infectious diseases (specifically  
CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents the lower strand of a human TERC-targeted double-stranded  
CC siNA.  
XX Sequence 19 BP; 5 A; 7 C; 4 G; 0 T; 3 U; 0 Other;  
SQ Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 302 AGAGTTGGGCTCTGTACG 320  
DB 19 AGAGTTGGGCTCTGTACG 1  
RESULT 180  
ADF93564/c  
ID ADF93564 standard; RNA; 19 BP.  
AC ADF93564;  
XX 26-FEB-2004 (first entry)  
DE Human TERC siNA lower strand, SEQ ID 291.  
XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
XX Homo sapiens.  
XX WO2003070742-A1.  
XX 28-AUG-2003.  
XX 11-FEB-2003; 2003WO-US004088.  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.

PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX Mcswiggen J, Beigelman L;  
XX WPI; 2003-689777/65.  
XX New short interfering nucleic acid downregulates expression of the  
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX Example 3; SEQ ID NO 291; 145pp; English.  
XX The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the one or more telomerase genes by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of the telomerase genes in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, infectious diseases (specifically  
CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents the lower strand of a human TERC-targeted double-stranded  
CC siNA.  
XX Sequence 19 BP; 1 A; 7 C; 6 G; 0 T; 5 U; 0 Other;  
SQ Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 374 AGGAACGGAGCGAGTCCCC 392  
DB 19 AGGAACGGAGCGAGTCCCC 1  
RESULT 181  
ADF93294  
ID ADF93294 standard; RNA; 19 BP.  
XX ADF93294;  
XX 26-FEB-2004 (first entry)  
DT Human TERC transcript target sequence/siNA upper strand, SEQ ID 11.  
XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
XX Homo sapiens.  
XX

PN WO2003070742-A1.  
XX 28-AUG-2003.  
XX 11-FEB-2003; 2003WO-US004088.  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX Mcswiggen J, Beigelman L;  
XX WPI; 2003-689777/65.  
XX New short interfering nucleic acid downregulates expression of the  
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX Example 3; SEQ ID NO 11; 145pp; English.  
XX The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the one or more telomerase genes by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of the telomerase genes in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, infectious diseases (specifically  
CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents the upper strand of a human TERC-targeted double-stranded  
CC siNA, which is identical to the c-fos transcript target sequence.  
XX Sequence 19 BP; 0 A; 8 C; 4 G; 0 T; 7 U; 0 Other;  
SQ Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 63.2%; Pred. NO. 1.5e+02;  
Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0;  
QY 86 TCCCGCGCGCTGTTTTC 104  
DB 1 UCCCGCGCGCGUUGUUC 19  
RESULT 182  
AD93299  
ID ADF93299 standard; RNA; 19 BP.  
XX ADF93299;  
XX 26-FEB-2004 (first entry)  
DT Human TERC transcript target sequence/siNA upper strand, SEQ ID 16.  
XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;

KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; tERC;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TEXT; ss.  
XX Homo sapiens.  
XX WO2003070742-A1.  
XX 28-AUG-2003.  
XX 11-FEB-2003; 2003WO-US004088.  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX Mcswiggen J, Beigelman L;  
XX WPI; 2003-689777/65.  
XX New short interfering nucleic acid downregulates expression of the  
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX Example 3; SEQ ID NO 16; 145pp; English.  
XX The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the one or more telomerase genes by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of the telomerase genes in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, infectious diseases (specifically  
CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents the upper strand of a human TERC-targeted double-stranded  
CC siNA, which is identical to the c-fos transcript target sequence.  
XX Sequence 19 BP; 2 A; 6 C; 6 G; 0 T; 5 U; 0 Other;  
SQ Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 73.7%; Pred. NO. 1.5e+02;  
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

QY 176 ATGTCAGCTGCGCCCGT 194  
DB 1 AUGUCAGCGCGGCCCGU 19

RESULT 183

ADFP3300  
ID ADF93300 standard; RNA; 19 BP.  
XX  
AC ADF93300;  
XX  
XX 26-FEB-2004 (first entry)  
XX  
XX Human TERC transcript target sequence/siNA upper strand, SEQ ID 17.  
XX  
XX Cytostatic; vasotropic; protozoicide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO2003070742-A1.  
XX  
XX 28-AUG-2003.  
XX  
XX 11-FEB-2003; 2003WO-US004088.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
XX  
XX McSwiggen J, Beigelman L;  
XX WPI; 2003-689777/65.  
XX  
XX New short interfering nucleic acid downregulates expression of the  
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
XX Example 3; SEQ ID NO 17; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the one or more telomerase genes by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of the telomerase genes in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, infectious diseases (specifically  
CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents the upper strand of a human TERC-targeted double-stranded  
CC siNA, which is identical to the c-fos transcript target sequence.  
XX  
XX Sequence 19 BP; 1 A; 10 C; 5 G; 0 T; 3 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 1.5e+02;  
Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;  
Oy 194 TTCGCCCTCCCGGGACC 212  
:|||||:|||||  
Db 1 UUCGCCCCUCCGGGACC 19  
:  
RESULT 184  
ADFP3306  
ID ADF93306 standard; RNA; 19 BP.  
XX  
XX ADF93306;  
AC ADF93306;  
XX  
XX 26-FEB-2004 (first entry)  
DT  
XX  
XX Human TERC transcript target sequence/siNA upper strand, SEQ ID 23.  
XX  
XX Cytostatic; vasotropic; protozoicide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
XX  
OS Homo sapiens.  
XX  
XX WO2003070742-A1.  
XX  
XX 28-AUG-2003.  
XX  
XX 11-FEB-2003; 2003WO-US004088.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
XX  
XX McSwiggen J, Beigelman L;  
XX WPI; 2003-689777/65.  
XX  
XX New short interfering nucleic acid downregulates expression of the  
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
XX Example 3; SEQ ID NO 23; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the one or more telomerase genes by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of the telomerase genes in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, infectious diseases (specifically  
CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents the upper strand of a human TERC-targeted double-stranded  
CC siNA, which is identical to the c-fos transcript target sequence.  
XX  
XX Sequence 19 BP; 1 A; 10 C; 5 G; 0 T; 3 U; 0 Other;

CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents the upper strand of a human TERC-targeted double-stranded  
 CC siNA, which is identical to the c-fos transcript target sequence.  
 XX  
 SQ Sequence 19 BP; 3 A; 4 C; 7 G; 0 T; 5 U; 0 Other;  
 Query Match 4.2%; Score 19; DB 1; Length 19;  
 Best Local Similarity 73.7%; Pred. No. 1.5e+02;  
 Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;  
 Qy 302 AGAGTTGGGCTCTGTCCAGC 320  
 Db 1 AGAGUUGGCUUCUACAC 19  
 RESULT 185  
 ADF93314  
 ID ADF93314 standard; RNA; 19 BP.  
 XX  
 AC ADF93314;  
 DT 26-FEB-2004 (first entry)  
 XX  
 DE Human TERC transcript target sequence/siNA upper strand, SEQ ID 31.  
 XX  
 KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
 KW RNA interference; short interfering nucleic acid; siNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX  
 PN WO2003070742-A1.  
 XX  
 PD 28-AUG-2003.  
 XX  
 XX 11-FEB-2003; 2003WO-US004088.  
 XX  
 PR 20-FEB-2002; 2002US-0358580P.  
 PR 11-MAR-2002; 2002US-0363124P.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 17-JUL-2002; 2002US-0396600P.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 15-JAN-2003; 2003US-0440129P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 PI Mcswiggen J, Beigelman L;  
 XX  
 XX WPI; 2003-689777/65.  
 XX  
 DR New short interfering nucleic acid downregulates expression of the  
 PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
 XX  
 PS Example 3; SEQ ID NO 31; 145pp; English.  
 XX  
 CC The invention relates to short interfering nucleic acids (siNA) which  
 CC downregulate expression of the one or more telomerase genes by RNA  
 CC interference. The siNAs may or may not comprise ribonucleotides and may  
 CC be double or single stranded. They further comprise sense and antisense  
 CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short

CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
 CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grats and  
 CC transplantants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents the upper strand of a human TERC-targeted double-stranded  
 CC siNA, which is identical to the c-fos transcript target sequence.  
 XX  
 SQ Sequence 19 BP; 5 A; 7 C; 4 G; 0 T; 3 U; 0 Other;  
 Query Match 4.2%; Score 19; DB 1; Length 19;  
 Best Local Similarity 84.2%; Pred. No. 1.5e+02;  
 Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;  
 Qy 431 CAGGACTCGGCTCACACAT 449  
 Db 1 CAGGACUCGCGUCACAU 19  
 RESULT 186  
 ADF93563/c  
 ID ADF93563 standard; RNA; 19 BP.  
 XX  
 AC ADF93563;  
 XX  
 DT 26-FEB-2004 (first entry)  
 XX  
 DE Human TERC siNA lower strand, SEQ ID 290.  
 XX  
 KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
 KW RNA interference; short interfering nucleic acid; siNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 XX  
 PN WO2003070742-A1.  
 XX  
 PD 28-AUG-2003.  
 XX  
 XX 11-FEB-2003; 2003WO-US004088.  
 XX  
 PR 20-FEB-2002; 2002US-0358580P.  
 PR 11-MAR-2002; 2002US-0363124P.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 17-JUL-2002; 2002US-0396600P.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 15-JAN-2003; 2003US-0440129P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 PI Mcswiggen J, Beigelman L;  
 XX  
 XX WPI; 2003-689777/65.  
 XX  
 DR New short interfering nucleic acid downregulates expression of the  
 PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
 XX

XX Example 3; SEQ ID NO 290; 145pp; English.

XX The invention relates to short interfering nucleic acids (siNA) which

XX downregulate expression of the one or more telomerase genes by RNA

XX interference. The siNAs may or may not comprise ribonucleotides and may

XX be double or single stranded. They further comprise sense and antisense

XX regions, or alternatively are assembled from a sense oligonucleotide and

XX an antisense oligonucleotide. Specifically, the siNAs include short

XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short

XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,

XX can contain deoxyribonucleotides, and can be chemically synthesised,

XX expressed from a vector or enzymatically synthesised. The invention also

XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates

XX and/or complexes of siNA; and vectors that express siNA. The siNAs are

XX used to modulate expression of the telomerase genes in cells, tissue

XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and

XX transplants for the treatment of a variety of conditions. They may be

XX used for treating cancer, restenosis, infectious diseases (specifically

XX protozoal), transplant rejection, or autoimmune or age-related diseases,

XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,

XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug

XX screening, diagnosis, therapeutic target identification and validation,

XX genetic engineering, pharmacogenomics, studying gene function, and gene

XX mapping (e.g., of single nucleotide polymorphisms). The present sequence

XX represents the lower strand of a human TERC-targeted double-stranded

XX siNA.

SQ Sequence 19 BP; 3 A; 6 C; 5 G; 0 T; 5 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 1.5e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 356 CTTTCAGGCGCCGAGAGA 374

DB 19 CTTTCAGGCGCCGAGAGA 1

RESULT 187

ADP93304

ID ADF93304 standard; RNA; 19 BP.

XX ADF93304;

XX 26-FEB-2004 (first entry)

XX Human TERC transcript target sequence/siNA upper strand, SEQ ID 21.

XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;

XX neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;

XX antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;

XX RNA interference; short interfering nucleic acid; siNA;

XX short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;

XX short hairpin RNA; shRNA; expression modulation; gene therapy;

XX drug screening; diagnosis; therapeutic target identification;

XX pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.

XX Homo sapiens.

XX WO2003070742-A1.

XX 28-AUG-2003.

XX 11-FEB-2003; 2003WO-US004088.

XX 20-FEB-2002; 2002US-0358580P.

XX 11-MAR-2002; 2002US-0363124P.

XX 06-JUN-2002; 2002US-0386782P.

XX 17-JUL-2002; 2002US-0396600P.

XX 29-AUG-2002; 2002US-0406784P.

XX 05-SEP-2002; 2002US-0408378P.

XX 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Beigelman L;

XX WPI; 2003-689777/65.

XX New short interfering nucleic acid downregulates expression of the

XX telomerase gene useful e.g. for treatment and diagnosis of cancer.

XX Example 3; SEQ ID NO 21; 145pp; English.

XX The invention relates to short interfering nucleic acids (siNA) which

XX downregulate expression of the one or more telomerase genes by RNA

XX interference. The siNAs may or may not comprise ribonucleotides and may

XX be double or single stranded. They further comprise sense and antisense

XX regions, or alternatively are assembled from a sense oligonucleotide and

XX an antisense oligonucleotide. Specifically, the siNAs include short

XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short

XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,

XX can contain deoxyribonucleotides, and can be chemically synthesised,

XX expressed from a vector or enzymatically synthesised. The invention also

XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates

XX and/or complexes of siNA; and vectors that express siNA. The siNAs are

XX used to modulate expression of the telomerase genes in cells, tissue

XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and

XX transplants for the treatment of a variety of conditions. They may be

XX used for treating cancer, restenosis, infectious diseases (specifically

XX protozoal), transplant rejection, or autoimmune or age-related diseases,

XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,

XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug

XX screening, diagnosis, therapeutic target identification and validation,

XX genetic engineering, pharmacogenomics, studying gene function, and gene

XX mapping (e.g., of single nucleotide polymorphisms). The present sequence

XX represents the upper strand of a human TERC-targeted double-stranded

XX siNA, which is identical to the c-fos transcript target sequence.

SQ Sequence 19 BP; 1 A; 7 C; 8 G; 0 T; 3 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;

Best Local Similarity 84.2%; Pred. No. 1.5e+02;

Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 266 CCGGGGCTTCTCCGGAGGC 284

DB 1 CCGGGGCTTCTCCGGAGGC 19

RESULT 188

ADP93549/c

ID ADF93549 standard; RNA; 19 BP.

XX ADF93549;

XX 26-FEB-2004 (first entry)

XX Human TERC siNA lower strand, SEQ ID 276.

XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;

XX neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;

XX antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;

XX RNA interference; short interfering nucleic acid; siNA;

XX short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;

XX short hairpin RNA; shRNA; expression modulation; gene therapy;

XX drug screening; diagnosis; therapeutic target identification;

XX pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.

XX Homo sapiens.

XX WO2003070742-A1.

XX 28-AUG-2003.

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XX 11-FEB-2003; 2003WO-US004088.
XX 20-FEB-2002; 2002US-0358580P.
XX 11-MAR-2002; 2002US-0363124P.
XX 06-JUN-2002; 2002US-0386782P.
XX 17-JUL-2002; 2002US-0396600P.
XX 29-AUG-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 15-JAN-2003; 2003US-0440129P.
XX (RIBO-) RIBOZYME PHARM INC.
XX Mcswiggen J, Beigelman L;
XX WPI; 2003-689777/65.
XX New short interfering nucleic acid downregulates expression of the
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.
XX Example 3; SEQ ID NO 276; 145pp; English.
XX The invention relates to short interfering nucleic acids (siNA) which
XX downregulate expression of the one or more telomerase genes by RNA
XX interference. The siNAs may or may not comprise ribonucleotides and may
XX be double or single stranded. They further comprise sense and antisense
XX regions, or alternatively are assembled from a sense oligonucleotide and
XX an antisense oligonucleotide. Specifically, the siNAs include short
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
XX can contain deoxyribonucleotides, and can be chemically synthesised,
XX expressed from a vector or enzymatically synthesised. The invention also
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates
XX and/or complexes of siNA; and vectors that express siNA. The siNAs are
XX used to modulate expression of the telomerase genes in cells, tissue
XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
XX transplants for the treatment of a variety of conditions. They may be
XX used for treating cancer, restenosis, infectious diseases (specifically
XX protozoal), transplant rejection, or autoimmune or age-related diseases,
XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,
XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug
XX screening, diagnosis, therapeutic target identification and validation,
XX genetic engineering, pharmacogenomics, studying gene function, and gene
XX mapping (e.g., of single nucleotide polymorphisms). The present sequence
XX represents the lower strand of a human TERC-targeted double-stranded
XX siNA.
XX Sequence 19 BP; 5 A; 6 C; 6 G; 0 T; 2 U; 0 Other;
XX Query Match 4.2%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 1.5e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX 104 CTCGCTGACTTTCAGCGG 122
XX 19 CTCGCTGACTTTCAGCGG 1
XX Db
XX RESULT 189
XX ADF93567/c
XX ID ADF93567 standard; RNA; 19 BP.
XX AC ADF93567;
XX XX
XX 26-FEB-2004 (first entry)
XX DT Human TERC siNA lower strand, SEQ ID 294.
XX DE
XX XX
XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;
XX neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;
XX antiarthritic; antinflammatory; gene therapy; telomerase; human; terc;
XX RNA interference; short interfering nucleic acid; siNA;
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```
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KW short hairpin RNA; shRNA; expression modulation; gene therapy;
KW drug screening; diagnosis; therapeutic target identification;
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERC; ss.
XX Homo sapiens.
XX WO2003070742-A1.
XX 28-AUG-2003.
XX 11-FEB-2003; 2003WO-US004088.
XX 20-FEB-2002; 2002US-0358580P.
XX 11-MAR-2002; 2002US-0363124P.
XX 06-JUN-2002; 2002US-0386782P.
XX 17-JUL-2002; 2002US-0396600P.
XX 29-AUG-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 15-JAN-2003; 2003US-0440129P.
XX (RIBO-) RIBOZYME PHARM INC.
XX Mcswiggen J, Beigelman L;
XX WPI; 2003-689777/65.
XX New short interfering nucleic acid downregulates expression of the
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.
XX Example 3; SEQ ID NO 294; 145pp; English.
XX The invention relates to short interfering nucleic acids (siNA) which
XX downregulate expression of the one or more telomerase genes by RNA
XX interference. The siNAs may or may not comprise ribonucleotides and may
XX be double or single stranded. They further comprise sense and antisense
XX regions, or alternatively are assembled from a sense oligonucleotide and
XX an antisense oligonucleotide. Specifically, the siNAs include short
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
XX can contain deoxyribonucleotides, and can be chemically synthesised,
XX expressed from a vector or enzymatically synthesised. The invention also
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates
XX and/or complexes of siNA; and vectors that express siNA. The siNAs are
XX used to modulate expression of the telomerase genes in cells, tissue
XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
XX transplants for the treatment of a variety of conditions. They may be
XX used for treating cancer, restenosis, infectious diseases (specifically
XX protozoal), transplant rejection, or autoimmune or age-related diseases,
XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,
XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug
XX screening, diagnosis, therapeutic target identification and validation,
XX genetic engineering, pharmacogenomics, studying gene function, and gene
XX mapping (e.g., of single nucleotide polymorphisms). The present sequence
XX represents the lower strand of a human TERC-targeted double-stranded
XX siNA.
XX Sequence 19 BP; 2 A; 4 C; 8 G; 0 T; 5 U; 0 Other;
XX Query Match 4.2%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 1.5e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX 428 ACCGAGGACTCGGCTCACA 446
XX 19 ACCGAGGACTCGGCTCACA 1
XX Db
XX RESULT 190
XX ADF93301
XX ID ADF93301 standard; RNA; 19 BP.
XX XX
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AC ADF933301;  
XX 26-FEB-2004 (first entry)  
XX Human TERC transcript target sequence/siNA upper strand, SEQ ID 18.  
XX  
XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
XX  
XX Homo sapiens.  
XX WO2003070742-A1.  
XX 28-AUG-2003.  
XX 11-FEB-2003; 2003WO-US004088.  
XX 20-FEB-2002; 2002US-0358580P.  
XX 11-MAR-2002; 2002US-0363124P.  
XX 06-JUN-2002; 2002US-0386782P.  
XX 17-JUL-2002; 2002US-0396600P.  
XX 29-AUG-2002; 2002US-0406784P.  
XX 05-SEP-2002; 2002US-0408378P.  
XX 09-SEP-2002; 2002US-0409293P.  
XX 15-JAN-2003; 2003US-0440129P.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Mcswiggen J, Beigelman L;  
XX WPI; 2003-689777/65.  
XX New short interfering nucleic acid downregulates expression of the  
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
XX Example 3; SEQ ID NO 18; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which  
XX downregulate expression of the one or more telomerase genes by RNA  
XX interference. The siNAs may or may not comprise ribonucleotides and may  
XX be double or single stranded. They further comprise sense and antisense  
XX regions, or alternatively are assembled from a sense oligonucleotide and  
XX an antisense oligonucleotide. Specifically, the siNAs include short  
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
XX can contain deoxyribonucleotides, and can be chemically synthesised,  
XX expressed from a vector or enzymatically synthesised. The invention also  
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
XX used to modulate expression of the telomerase genes in cells, tissue  
XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
XX used for treating cancer, restenosis, infectious diseases (specifically  
XX protozoal), transplant rejection, or autoimmune or age-related diseases,  
XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
XX genetic engineering, pharmacogenomics, studying gene function, and gene  
XX mapping (e.g., of single nucleotide polymorphisms). The present sequence  
XX represents the upper strand of a human TERC-targeted double-stranded  
XX siNA, which is identical to the c-fos transcript target sequence.  
XX  
XX Sequence 19 BP; 0 A; 8 C; 8 G; 0 T; 3 U; 0 Other;  
XX  
XX Query Match 4.2%; Score 19; DB 1; Length 19;  
XX Best Local Similarity 84.2%; Pred. No. 1.5e+02;  
XX Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 212 CTGCGCGGGTGCCTGCC 230  
|:|||||:|||||  
Db 1 CUGCGCGGGUCGCCGCC 19  
RESULT 191  
ADF93553/c  
ID ADF93553 standard; RNA; 19 BP.  
XX  
XX AC ADF93553;  
XX  
XX 26-FEB-2004 (first entry)  
XX  
XX Human TERC siNA lower strand, SEQ ID 280.  
XX  
XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
XX  
XX Homo sapiens.  
XX OS  
XX WO2003070742-A1.  
XX  
XX 28-AUG-2003.  
XX  
XX 11-FEB-2003; 2003WO-US004088.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
XX 11-MAR-2002; 2002US-0363124P.  
XX 06-JUN-2002; 2002US-0386782P.  
XX 17-JUL-2002; 2002US-0396600P.  
XX 29-AUG-2002; 2002US-0406784P.  
XX 05-SEP-2002; 2002US-0408378P.  
XX 09-SEP-2002; 2002US-0409293P.  
XX 15-JAN-2003; 2003US-0440129P.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Mcswiggen J, Beigelman L;  
XX WPI; 2003-689777/65.  
XX  
XX New short interfering nucleic acid downregulates expression of the  
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
XX Example 3; SEQ ID NO 280; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which  
XX downregulate expression of the one or more telomerase genes by RNA  
XX interference. The siNAs may or may not comprise ribonucleotides and may  
XX be double or single stranded. They further comprise sense and antisense  
XX regions, or alternatively are assembled from a sense oligonucleotide and  
XX an antisense oligonucleotide. Specifically, the siNAs include short  
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
XX can contain deoxyribonucleotides, and can be chemically synthesised,  
XX expressed from a vector or enzymatically synthesised. The invention also  
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
XX used to modulate expression of the telomerase genes in cells, tissue  
XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
XX used for treating cancer, restenosis, infectious diseases (specifically  
XX protozoal), transplant rejection, or autoimmune or age-related diseases,  
XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
XX screening, diagnosis, therapeutic target identification and validation,  
XX genetic engineering, pharmacogenomics, studying gene function, and gene  
XX mapping (e.g., of single nucleotide polymorphisms). The present sequence  
XX represents the upper strand of a human TERC-targeted double-stranded  
XX siNA, which is identical to the c-fos transcript target sequence.  
XX  
XX Sequence 19 BP; 0 A; 8 C; 8 G; 0 T; 3 U; 0 Other;



CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents the lower strand of a human TERC-targeted double-stranded  
CC siNA.  
XX  
SQ Sequence 19 BP; 5 A; 6 C; 6 G; 0 T; 2 U; 0 Other;  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 176 ATGTCAGCTGCTGCCCCGT 194  
DB 19 ATGTCAGCTGCTGCCCCGT 1  
RESULT 192  
ADF93568/C  
ID ADF93568 standard; RNA; 19 BP.  
XX  
AC ADF93568;  
XX  
DT 26-FEB-2004 (first entry)  
XX  
DE Human TERC siNA lower strand, SEQ ID 295.  
XX  
KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; tERC;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TEXT; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2003070742-A1.  
XX  
PD 28-AUG-2003.  
XX  
PF 11-FEB-2003; 2003WO-US004088.  
XX  
PR 20-FEB-2002; 2002US-0358580P.  
XX  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Mcswiggen J, Beigelman L;  
XX  
XX WPI; 2003-689777/65.  
XX  
PT New short interfering nucleic acid downregulates expression of the  
telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
XX Example 3; SEQ ID NO 295; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which  
downregulate expression of the one or more telomerase genes by RNA  
interference. The siNAs may or may not comprise ribonucleotides and may  
be double or single stranded. They further comprise sense and antisense  
regions, or alternatively are assembled from a sense oligonucleotide and  
an antisense oligonucleotide. Specifically, the siNAs include short  
interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
can contain deoxyribonucleotides, and can be chemically synthesised,  
expressed from a vector or enzymatically synthesised. The invention also

CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of the telomerase genes in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, or autoimmune or age-related diseases,  
CC (e.g., multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis). The siNAs are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents the lower strand of a human TERC-targeted double-stranded  
CC siNA.  
XX  
SQ Sequence 19 BP; 3 A; 4 C; 7 G; 0 T; 5 U; 0 Other;  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 431 CAGGACTCGGCTCACACAT 449  
DB 19 CAGGACTCGGCTCACACAT 1  
RESULT 193  
ADF93305  
ID ADF93305 standard; RNA; 19 BP.  
XX  
AC ADF93305;  
XX  
DT 26-FEB-2004 (first entry)  
XX  
DE Human TERC transcript target sequence/siNA upper strand, SEQ ID 22.  
XX  
KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; tERC;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TEXT; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2003070742-A1.  
XX  
PD 28-AUG-2003.  
XX  
PF 11-FEB-2003; 2003WO-US004088.  
XX  
PR 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Mcswiggen J, Beigelman L;  
XX  
XX WPI; 2003-689777/65.  
XX  
PT New short interfering nucleic acid downregulates expression of the  
telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
XX Example 3; SEQ ID NO 22; 145pp; English.  
XX



CC The invention relates to short interfering nucleic acids (siNA) which  
 CC downregulate expression of the one or more telomerase genes by RNA  
 CC interference. The siNAs may or may not comprise ribonucleotides and may  
 CC be double or single stranded. They further comprise sense and antisense  
 CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
 CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents the upper strand of a human TERC-targeted double-stranded  
 CC siNA, which is identical to the c-fos transcript target sequence.

XX Sequence 19 BP; 5 A; 10 C; 3 G; 0 T; 1 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;  
 Best Local Similarity 94.7%; Pred. No. 1.5e+02;  
 Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 284 CACCACATGCCACCGCGAA 302

Db 1 CACCACATGCCACCGCGAA 19

RESULT 194

ADF93547/c  
 ID ADF93547 standard; RNA; 19 BP.

XX ADF93547;

XX 26-FEB-2004 (first entry)

XX Human TERC siNA lower strand, SEQ ID 274.

XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
 KW RNA interference; short interfering nucleic acid; siNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.

XX Homo sapiens.

XX WO2003070742-A1.

XX 28-AUG-2003.

XX 11-FEB-2003; 2003WO-US004088.

XX 20-FEB-2002; 2002US-0358580P.

XX 11-MAR-2002; 2002US-0363124P.

XX 06-JUN-2002; 2002US-0386782P.

XX 17-JUL-2002; 2002US-0396600P.

XX 29-AUG-2002; 2002US-0406784P.

XX 05-SEP-2002; 2002US-0408378P.

XX 09-SEP-2002; 2002US-0409293P.

XX 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Beigelman L;  
 XX WPI; 2003-689777/65.

XX New short interfering nucleic acid downregulates expression of the  
 PT telomerase gene useful e.g. for treatment and diagnosis of cancer.

XX Example 3; SEQ ID NO 274; 145pp; English.

XX The invention relates to short interfering nucleic acids (siNA) which  
 CC downregulate expression of the one or more telomerase genes by RNA  
 CC interference. The siNAs may or may not comprise ribonucleotides and may  
 CC be double or single stranded. They further comprise sense and antisense  
 CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
 CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents the lower strand of a human TERC-targeted double-stranded  
 CC siNA.

XX Sequence 19 BP; 7 A; 6 C; 5 G; 0 T; 1 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 1.5e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 68 TAGGCGCGCTTTTGTCT 86

Db 19 TAGGCGCGCTTTTGTCT 1

RESULT 195

ADF93548/c

ID ADF93548 standard; RNA; 19 BP.

XX ADF93548;

XX 26-FEB-2004 (first entry)

XX Human TERC siNA lower strand, SEQ ID 275.

XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
 KW RNA interference; short interfering nucleic acid; siNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.

XX Homo sapiens.

XX WO2003070742-A1.

XX 28-AUG-2003.

XX 11-FEB-2003; 2003WO-US004088.

PR 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
PA  
XX  
XX Mcswiggen J, Beigelman L;  
XX  
XX WPI; 2003-689777/65.  
XX  
XX New short interfering nucleic acid downregulates expression of the  
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
PT  
XX  
XX Example 3; SEQ ID NO 275; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the one or more telomerase genes by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of the telomerase genes in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, infectious diseases (specifically  
CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents the lower strand of a human TERC-targeted double-stranded  
CC siNA.  
XX  
XX Sequence 19 BP; 7 A; 4 C; 8 G; 0 T; 0 U; 0 Other;  
SQ  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 86 TCCCGCGCGCTGTTTTC 104  
DB 19 TCCCGCGCGCTGTTTTC 1  
RESULT 196  
ADF93550/c  
ID ADF93550 standard; RNA; 19 BP.  
XX  
XX ADF93550;  
AC  
XX  
XX 26-FEB-2004 (first entry)  
DT  
XX Human TERC siNA lower strand, SEQ ID 277.  
DE  
XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;

KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
OS  
XX Homo sapiens.  
XX  
XX WO2003070742-A1.  
XX  
XX 28-AUG-2003.  
XX  
XX 11-FEB-2003; 2003WO-US004088.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
PA  
XX  
XX Mcswiggen J, Beigelman L;  
XX  
XX WPI; 2003-689777/65.  
XX  
XX New short interfering nucleic acid downregulates expression of the  
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
PT  
XX  
XX Example 3; SEQ ID NO 277; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the one or more telomerase genes by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of the telomerase genes in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, infectious diseases (specifically  
CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents the lower strand of a human TERC-targeted double-stranded  
CC siNA.  
XX  
XX Sequence 19 BP; 2 A; 7 C; 6 G; 0 T; 4 U; 0 Other;  
SQ  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 122 GCGGAAAAGCTCGGCTG 140  
DB 19 GCGGAAAAGCTCGGCTG 1  
RESULT 197  
ADF93555/c  
ID ADF93555 standard; RNA; 19 BP.  
XX  
XX ADF93555;  
AC  
XX  
XX 26-FEB-2004 (first entry)  
DT

XX	Human TERC siNA lower strand, SEQ ID 282.	Db	19	CTGGGGGGTGGCTGCC	1
XX	Cytostatic; vasotropic; protozoicide; immunosuppressive; dermatological;	RESULT 198			
XX	neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;	ADF93556/c			
KW	antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;	ID	ADF93556	standard; RNA; 19	BP.
KW	RNA interference; short interfering nucleic acid; siNA;	XX			
KW	short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;	AC	ADF93556;		
KW	short hairpin RNA; shRNA; expression modulation; gene therapy;	XX			
KW	drug screening; diagnosis; therapeutic target identification;	DT	26-FEB-2004	(first entry)	
KW	pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.	XX			
XX	Homo sapiens.	DE	Human TERC siNA lower strand, SEQ ID 283.		
XX		XX			
KW	Cytostatic; vasotropic; protozoicide; immunosuppressive; dermatological;	KW			
KW	neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;	KW			
KW	antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;	KW			
KW	RNA interference; short interfering nucleic acid; siNA;	KW			
KW	short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;	KW			
KW	short hairpin RNA; shRNA; expression modulation; gene therapy;	KW			
KW	drug screening; diagnosis; therapeutic target identification;	KW			
KW	pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.	KW			
XX	Homo sapiens.	OS			
XX		XX			
PN	WO2003070742-A1.	XX			
XX	28-AUG-2003.	XX			
XX		XX			
XX	11-FEB-2003; 2003WO-US004088.	XX			
XX		XX			
XX	20-FEB-2002; 2002US-0358580P.	XX			
XX		XX			
PR	11-MAR-2002; 2002US-0363124P.	XX			
PR		XX			
PR	06-JUN-2002; 2002US-0386782P.	XX			
PR		XX			
PR	17-JUL-2002; 2002US-0396600P.	XX			
PR		XX			
PR	29-AUG-2002; 2002US-0406784P.	XX			
PR		XX			
PR	05-SEP-2002; 2002US-0408378P.	XX			
PR		XX			
PR	09-SEP-2002; 2002US-0409293P.	XX			
PR		XX			
PR	15-JAN-2003; 2003US-0440129P.	XX			
XX		XX			
XX	(RIBO-) RIBOZYME PHARM INC.	XX			
XX		XX			
XX		XX			
XX	Mcswiggen J, Beigelman L;	XX			
XX		XX			
XX	WPI; 2003-689777/65.	XX			
XX		XX			
XX	New short interfering nucleic acid downregulates expression of the	XX			
XX	telomerase gene useful e.g. for treatment and diagnosis of cancer.	XX			
XX		XX			
XX	Example 3; SEQ ID NO 282; 145pp; English.	XX			
XX		XX			
XX	The invention relates to short interfering nucleic acids (siNA) which	XX			
XX	downregulate expression of the one or more telomerase genes by RNA	XX			
XX	interference. The siNAs may or may not comprise ribonucleotides and may	XX			
XX	be double or single stranded. They further comprise sense and antisense	XX			
XX	regions, or alternatively are assembled from a sense oligonucleotide and	XX			
XX	an antisense oligonucleotide. Specifically, the siNAs include short	XX			
XX	interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short	XX			
XX	hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,	XX			
XX	can contain deoxyribonucleotides, and can be chemically synthesised,	XX			
XX	expressed from a vector or enzymatically synthesised. The invention also	XX			
XX	relates to kits for the in vitro or in vivo delivery of siNA; conjugates	XX			
XX	and/or complexes of siNA; and vectors that express siNA. The siNAs are	XX			
XX	used to modulate expression of the telomerase genes in cells, tissue	XX			
XX	explants or organisms (e.g., by ex vivo gene therapy), or in grafts and	XX			
XX	transplants for the treatment of a variety of conditions. They may be	XX			
XX	used for treating cancer, restenosis, infectious diseases (specifically	XX			
XX	protozoal), transplant rejection, or autoimmune or age-related diseases,	XX			
XX	e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,	XX			
XX	skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug	XX			
XX	screening, diagnosis, therapeutic target identification and validation,	XX			
XX	genetic engineering, pharmacogenomics, studying gene function, and gene	XX			
XX	mapping (e.g., of single nucleotide polymorphisms). The present sequence	XX			
XX	represents the lower strand of a human TERC-targeted double-stranded	XX			
XX	siNA.	XX			
XX		XX			
XX	Sequence 19 BP; 3 A; 8 C; 8 G; 0 T; 0 U; 0 Other;	XX			
XX		XX			
XX	Query Match	XX			
XX	Best Local Similarity 4.2%; Score 19; DB 1; Length 19;	XX			
XX	Matches 19; Conservative 100.0%; Pred. No. 1.5e+02;	XX			
XX	Mismatches 0; Indels 0; Gaps 0;	XX			
XX		XX			
XX	212 CTGGGGGGTGGCTGCC 230	XX			
XX		XX			



CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of the telomerase genes in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, infectious diseases (specifically  
CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents the upper strand of a human TERC-targeted double-stranded  
CC siNA, which is identical to the c-fos transcript target sequence.

XX Sequence 19 BP; 3 A; 13 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 230 CCAGCCCCCGAACCCCGCC 248

DB 1 CCAGCCCCCGAACCCCGCC 19

RESULT 201

ADFP3290

ID ADF93290 standard; RNA; 19 BP.

XX ADF93290;

XX 26-FEB-2004 (first entry)

XX Human TERC transcript target sequence/siNA upper strand, SEQ ID 7.

XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
XX neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
XX antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
XX RNA interference; short interfering nucleic acid; siNA;  
XX short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
XX short hairpin RNA; shRNA; expression modulation; gene therapy;  
XX drug screening; diagnosis; therapeutic target identification;  
XX pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.

XX Homo sapiens.

XX WO2003070742-A1.

XX 28-AUG-2003.

XX 11-FEB-2003; 2003WO-US004088.

XX 20-FEB-2002; 2002US-0358580P.

XX 11-MAR-2002; 2002US-0363124P.

XX 06-JUN-2002; 2002US-0386782P.

XX 17-JUL-2002; 2002US-0396600P.

XX 29-AUG-2002; 2002US-0406784P.

XX 05-SEP-2002; 2002US-0408378P.

XX 09-SEP-2002; 2002US-0409293P.

XX 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Beigelman L;

DR WPI; 2003-689777/65.

XX New short interfering nucleic acid downregulates expression of the  
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.

XX Example 3; SEQ ID NO 7; 145pp; English.

XX The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the one or more telomerase genes by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC used to modulate expression of the telomerase genes in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, infectious diseases (specifically  
CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents the upper strand of a human TERC-targeted double-stranded  
CC siNA, which is identical to the c-fos transcript target sequence.

XX Sequence 19 BP; 1 A; 2 C; 12 G; 0 T; 4 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;

Best Local Similarity 78.9%; Pred. No. 1.5e+02;

Matches 15; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

OY 14 TGGGCGCTGGGAGGGTGGT 32

DB 1 UGGGCCUGGAGGGUGGU 19

RESULT 202

ADFP3295

ID ADF93295 standard; RNA; 19 BP.

XX ADF93295;

XX 26-FEB-2004 (first entry)

XX Human TERC transcript target sequence/siNA upper strand, SEQ ID 12.

XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
XX neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
XX antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
XX RNA interference; short interfering nucleic acid; siNA;  
XX short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
XX short hairpin RNA; shRNA; expression modulation; gene therapy;  
XX drug screening; diagnosis; therapeutic target identification;  
XX pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.

XX Homo sapiens.

XX WO2003070742-A1.

XX 28-AUG-2003.

XX 11-FEB-2003; 2003WO-US004088.

XX 20-FEB-2002; 2002US-0358580P.

XX 11-MAR-2002; 2002US-0363124P.

XX 06-JUN-2002; 2002US-0386782P.

PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX (RIBO-) RIBOZYME PHARM INC.  
PA Mcswiggen J, Beigelman L;  
XX WPI; 2003-689777/65.  
XX New short interfering nucleic acid downregulates expression of the  
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
PT Example 3; SEQ ID NO 12; 145pp; English.  
XX The invention relates to short interfering nucleic acids (siNA) which  
XX downregulate expression of the one or more telomerase genes by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, infectious diseases (specifically  
CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents the upper strand of a human TERC-targeted double-stranded  
CC siNA, which is identical to the c-fos transcript target sequence.  
XX  
SQ Sequence 19 BP; 2 A; 6 C; 6 G; 0 T; 5 U; 0 Other;  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 73.7%; Pred. No. 1.5e+02;  
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;  
QY 104 CTCGCTGACTTTCAGCGG 122  
Db 1 CUCGCGACUUCAGCGG 19  
RESULT 203  
ADF93545/c  
ID ADF93545 standard; RNA; 19 BP.  
XX ADF93545;  
XX ADF93545;  
XX 26-FEB-2004 (first entry)  
XX Human TERC siNA lower strand, SEQ ID 272.  
XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
XX Homo sapiens.  
OS

XX WO2003070742-A1.  
XX 28-AUG-2003.  
XX 11-FEB-2003; 2003WO-US004088.  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX Mcswiggen J, Beigelman L;  
PI WPI; 2003-689777/65.  
XX New short interfering nucleic acid downregulates expression of the  
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
PT Example 3; SEQ ID NO 272; 145pp; English.  
XX The invention relates to short interfering nucleic acids (siNA) which  
XX downregulate expression of the one or more telomerase genes by RNA  
CC interference. The siNAs may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNAs include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, infectious diseases (specifically  
CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents the lower strand of a human TERC-targeted double-stranded  
CC siNA.  
XX  
SQ Sequence 19 BP; 9 A; 3 C; 4 G; 0 T; 3 U; 0 Other;  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 32 TGGCCATTTTGTCTAAC 50  
Db 19 TGGCCATTTTGTCTAAC 1  
RESULT 204  
ADF93558/c  
ID ADF93558 standard; RNA; 19 BP.  
XX ADF93558;  
AC ADF93558;  
XX 26-FEB-2004 (first entry)  
XX Human TERC siNA lower strand, SEQ ID 285.  
XX

KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siRNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
OS Homo sapiens.  
XX WO2003070742-A1.  
XX 28-AUG-2003.  
XX 11-FEB-2003; 2003WO-US004088.  
XX 20-FEB-2002; 2002US-0358580P.  
XX 11-MAR-2002; 2002US-0363124P.  
XX 06-JUN-2002; 2002US-0386782P.  
XX 17-JUL-2002; 2002US-0396600P.  
XX 29-AUG-2002; 2002US-0406784P.  
XX 05-SEP-2002; 2002US-0408378P.  
XX 09-SEP-2002; 2002US-0409293P.  
XX 15-JAN-2003; 2003US-0440129P.  
PA (RIBO-) RIBOZYME PHARM INC.  
XX Mcswiggen J, Beigelman L;  
XX WPI; 2003-689777/65.  
XX New short interfering nucleic acid downregulates expression of the  
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX Example 3; SEQ ID NO 285; 145pp; English.  
XX The invention relates to short interfering nucleic acids (siNA) which  
XX downregulate expression of the one or more telomerase genes by RNA  
XX interference. The siNAs may or may not comprise ribonucleotides and may  
XX be double or single stranded. They further comprise sense and antisense  
XX regions, or alternatively are assembled from a sense oligonucleotide and  
XX an antisense oligonucleotide. Specifically, the siNAs include short  
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
XX can contain deoxyribonucleotides, and can be chemically synthesised,  
XX expressed from a vector or enzymatically synthesised. The invention also  
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
XX and/or complexes of siNA; and vectors that express siNA. The siNAs are  
XX used to modulate expression of the telomerase genes in cells, tissue  
XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
XX transplants for the treatment of a variety of conditions. They may be  
XX used for treating cancer, restenosis, infectious diseases (specifically  
XX protozoal), transplant rejection, or autoimmune or age-related diseases,  
XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
XX screening, diagnosis, therapeutic target identification and validation,  
XX genetic engineering, pharmacogenomics, studying gene function, and gene  
XX mapping (e.g., of single nucleotide polymorphisms). The present sequence  
XX represents the lower strand of a human TERC-targeted double-stranded  
XX siNA.  
XX Sequence 19 BP; 3 A; 8 C; 7 G; 0 T; 1 U; 0 Other;  
SQ Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Oy 266 CCGGGGCTTCTCCGAGGC 284  
DB 19 CCGGGGCTTCTCCGAGGC 1

RESULT 205  
ID ADF93561/c  
XX ADF93561 standard; RNA; 19 BP.  
XX ADF93561;  
XX AC ADF93561;  
XX 26-FEB-2004 (first entry)  
XX Human TERC siNA lower strand, SEQ ID 288.  
XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
XX Homo sapiens.  
OS WO2003070742-A1.  
XX 28-AUG-2003.  
XX 11-FEB-2003; 2003WO-US004088.  
XX 20-FEB-2002; 2002US-0358580P.  
XX 11-MAR-2002; 2002US-0363124P.  
XX 06-JUN-2002; 2002US-0386782P.  
XX 17-JUL-2002; 2002US-0396600P.  
XX 29-AUG-2002; 2002US-0406784P.  
XX 05-SEP-2002; 2002US-0408378P.  
XX 09-SEP-2002; 2002US-0409293P.  
XX 15-JAN-2003; 2003US-0440129P.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX Mcswiggen J, Beigelman L;  
XX WPI; 2003-689777/65.  
XX New short interfering nucleic acid downregulates expression of the  
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX Example 3; SEQ ID NO 288; 145pp; English.  
XX The invention relates to short interfering nucleic acids (siNA) which  
XX downregulate expression of the one or more telomerase genes by RNA  
XX interference. The siNAs may or may not comprise ribonucleotides and may  
XX be double or single stranded. They further comprise sense and antisense  
XX regions, or alternatively are assembled from a sense oligonucleotide and  
XX an antisense oligonucleotide. Specifically, the siNAs include short  
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
XX can contain deoxyribonucleotides, and can be chemically synthesised,  
XX expressed from a vector or enzymatically synthesised. The invention also  
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
XX and/or complexes of siNA; and vectors that express siNA. The siNAs are  
XX used to modulate expression of the telomerase genes in cells, tissue  
XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
XX transplants for the treatment of a variety of conditions. They may be  
XX used for treating cancer, restenosis, infectious diseases (specifically  
XX protozoal), transplant rejection, or autoimmune or age-related diseases,  
XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
XX screening, diagnosis, therapeutic target identification and validation,  
XX genetic engineering, pharmacogenomics, studying gene function, and gene  
XX mapping (e.g., of single nucleotide polymorphisms). The present sequence  
XX represents the lower strand of a human TERC-targeted double-stranded  
XX siNA.  
XX Sequence 19 BP; 3 A; 9 C; 7 G; 0 T; 0 U; 0 Other;  
SQ







CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
 CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents the upper strand of a human TERC-targeted double-stranded  
 CC siNA, which is identical to the c-fos transcript target sequence.

XX  
 SQ Sequence 19 BP; 5 A; 5 C; 6 G; 0 T; 3 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;  
 Best Local Similarity 84.2%; Pred. No. 1.5e+02;  
 Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 356 CTTTCAGGCCCGCAGGAAGA 374  
 Db 1 CUUUCAGGCCCGCAGGAAGA 19  
 ||:|||||

RESULT 208  
 ADF93310  
 ID ADF93310 standard; RNA; 19 BP.

AC ADF93310;

DT 26-FEB-2004 (first entry)

XX Human TERC transcript target sequence/siNA upper strand, SEQ ID 27.

KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
 KW RNA interference; short interfering nucleic acid; siNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.

XX  
 OS Homo sapiens.

XX WO2003070742-A1.

XX 28-AUG-2003.

XX 11-FEB-2003; 2003WO-US004088.

XX 20-FEB-2002; 2002US-0358580P.

XX 11-MAR-2002; 2002US-0363124P.

XX 06-JUN-2002; 2002US-0386782P.

XX 17-JUL-2002; 2002US-0396600P.

XX 29-AUG-2002; 2002US-0406784P.

XX 05-SEP-2002; 2002US-0408378P.

XX 09-SEP-2002; 2002US-0409293P.

XX 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Beigelman L;

XX WPT; 2003-689777/65.

XX New short interfering nucleic acid downregulates expression of the

PT telomerase gene useful e.g. for treatment and diagnosis of cancer.

XX Example 3; SEQ ID NO 27; 145pp; English.

XX The invention relates to short interfering nucleic acids (siNA) which  
 CC downregulate expression of the one or more telomerase genes by RNA  
 CC interference. The siNAs may or may not comprise ribonucleotides and may  
 CC be double or single stranded. They further comprise sense and antisense  
 CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
 CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents the upper strand of a human TERC-targeted double-stranded  
 CC siNA, which is identical to the c-fos transcript target sequence.

XX  
 SQ Sequence 19 BP; 5 A; 6 C; 7 G; 0 T; 1 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;  
 Best Local Similarity 94.7%; Pred. No. 1.5e+02;  
 Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 374 AGGAACGGAGCGAGTCCCC 392  
 Db 1 AGGAACGGAGCGAGUCCCC 19  
 |||:|||||

RESULT 209  
 ADF93292  
 ID ADF93292 standard; RNA; 19 BP.

XX ADF93292;

XX 26-FEB-2004 (first entry)

XX Human TERC transcript target sequence/siNA upper strand, SEQ ID 9.

XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
 KW RNA interference; short interfering nucleic acid; siNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.

XX Homo sapiens.

XX WO2003070742-A1.

XX 28-AUG-2003.

XX 11-FEB-2003; 2003WO-US004088.

XX 20-FEB-2002; 2002US-0358580P.

XX 11-MAR-2002; 2002US-0363124P.

XX 06-JUN-2002; 2002US-0386782P.

XX 17-JUL-2002; 2002US-0396600P.

XX 29-AUG-2002; 2002US-0406784P.

XX 05-SEP-2002; 2002US-0408378P.





Matches 17; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 428 ACCAGGACTCGGCTCACA 446  
|||||||:-|||:-|||  
Db 1 ACCAGGACUCGGCUCACA 19

RESULT 213  
ID ADF93557/c  
XX ADF93557 standard; RNA; 19 BP.  
AC ADF93557;  
XX  
DT 26-FEB-2004 (first entry)  
XX  
DE Human TERC siNA lower strand, SEQ ID 284.  
XX  
KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2003070742-A1.  
XX  
PD 28-AUG-2003.  
XX  
PF 11-FEB-2003; 2003WO-US004088.  
XX  
PR 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Mcswiggen J, Beigelman L;  
XX  
DR WPI; 2003-689777/65.  
XX  
PT New short interfering nucleic acid downregulates expression of the  
telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
PS Example 3; SEQ ID NO 284; 145pp; English.  
XX  
CC The invention relates to short interfering nucleic acids (siNA) which  
downregulate expression of the one or more telomerase genes by RNA  
interference. The siNAs may or may not comprise ribonucleotides and may  
be double or single stranded. They further comprise sense and antisense  
regions, or alternatively are assembled from a sense oligonucleotide and  
an antisense oligonucleotide. Specifically, the siNAs include short  
interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
can contain deoxyribonucleotides, and can be chemically synthesised,  
expressed from a vector or enzymatically synthesised. The invention also  
relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
and/or complexes of siNA; and vectors that express siNA. The siNAs are  
used to modulate expression of the telomerase genes in cells, tissue  
explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
transplants for the treatment of a variety of conditions. They may be  
used for treating cancer, restenosis, infectious diseases (specifically  
protozoal), transplant rejection, or autoimmune or age-related diseases,  
e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug

CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents the lower strand of a human TERC-targeted double-stranded  
CC siNA.  
XX  
SQ Sequence 19 BP; 2 A; 9 C; 7 G; 0 T; 1 U; 0 Other;  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 248 CTGGAGCGCGGTCGGCC 266  
|||||||:-|||:-|||  
Db 19 CTGGAGCGCGGTCGGCC 1

RESULT 214  
ID ADF93565/c  
XX ADF93565 standard; RNA; 19 BP.  
AC ADF93565;  
XX  
DT 26-FEB-2004 (first entry)  
XX  
DE Human TERC siNA lower strand, SEQ ID 292.  
XX  
KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO2003070742-A1.  
XX  
PD 28-AUG-2003.  
XX  
PF 11-FEB-2003; 2003WO-US004088.  
XX  
PR 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Mcswiggen J, Beigelman L;  
XX  
DR WPI; 2003-689777/65.  
XX  
PT New short interfering nucleic acid downregulates expression of the  
telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
PS Example 3; SEQ ID NO 292; 145pp; English.  
XX  
CC The invention relates to short interfering nucleic acids (siNA) which  
downregulate expression of the one or more telomerase genes by RNA  
interference. The siNAs may or may not comprise ribonucleotides and may  
be double or single stranded. They further comprise sense and antisense  
regions, or alternatively are assembled from a sense oligonucleotide and  
an antisense oligonucleotide. Specifically, the siNAs include short  
interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
can contain deoxyribonucleotides, and can be chemically synthesised,

CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siRNA; conjugates  
 CC and/or complexes of siRNA; and vectors that express siRNA. The siRNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siRNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents the lower strand of a human TERC-targeted double-stranded  
 CC siRNA.

SQ Sequence 19 BP; 2 A; 7 C; 9 G; 0 T; 1 U; 0 Other;  
 Query Match 4.2%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 392 CGCGCGCGCGCGATTCCC 410  
 DB 19 CGCGCGCGCGCGATTCCC 1

RESULT 215  
 ADF93551/C  
 ID ADF93551 standard; RNA; 19 BP.  
 AC ADF93551;  
 XX XX  
 DT 26-FEB-2004 (first entry)  
 XX XX  
 DE Human TERC siRNA lower strand, SEQ ID 278.  
 XX XX  
 KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antinflammatory; gene therapy; telomerase; human; terc;  
 KW RNA interference; short interfering nucleic acid; siRNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
 XX XX  
 OS Homo sapiens.  
 XX XX  
 PN WO2003070742-A1.  
 XX XX  
 PD 28-AUG-2003.  
 XX XX  
 PF 11-FEB-2003; 2003WO-US004088.  
 XX XX  
 PR 20-FEB-2002; 2002US-0358580P.  
 PR 11-MAR-2002; 2002US-0363124P.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 17-JUL-2002; 2002US-0396600P.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 15-JAN-2003; 2003US-0440129P.  
 XX XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX XX  
 PI Mcwiggan J, Beigelman L;  
 XX XX  
 DR WPI; 2003-689777/65.  
 XX XX  
 PT New short interfering nucleic acid downregulates expression of the  
 PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
 XX XX  
 PS Example 3; SEQ ID NO 278; 145pp; English.

XX The invention relates to short interfering nucleic acids (siNA) which  
 CC downregulate expression of the one or more telomerase genes by RNA  
 CC interference. The siNAs may or may not comprise ribonucleotides and may  
 CC be double or single stranded. They further comprise sense and antisense  
 CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
 CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents the lower strand of a human TERC-targeted double-stranded  
 CC siNA.

SQ Sequence 19 BP; 5 A; 3 C; 9 G; 0 T; 2 U; 0 Other;  
 Query Match 4.2%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 140 GCCGCCCTTCCACCGTTTCAT 158  
 DB 19 GCCGCCCTTCCACCGTTTCAT 1

RESULT 216  
 ADF93293  
 ID ADF93293 standard; RNA; 19 BP.  
 AC ADF93293;  
 XX XX  
 DT 26-FEB-2004 (first entry)  
 XX XX  
 DE Human TERC transcript target sequence/siNA upper strand, SEQ ID 10.  
 XX XX  
 KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antinflammatory; gene therapy; telomerase; human; terc;  
 KW RNA interference; short interfering nucleic acid; siRNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
 XX XX  
 OS Homo sapiens.  
 XX XX  
 PN WO2003070742-A1.  
 XX XX  
 PD 28-AUG-2003.  
 XX XX  
 PF 11-FEB-2003; 2003WO-US004088.  
 XX XX  
 PR 20-FEB-2002; 2002US-0358580P.  
 PR 11-MAR-2002; 2002US-0363124P.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 17-JUL-2002; 2002US-0396600P.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 15-JAN-2003; 2003US-0440129P.  
 XX XX

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PA (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J, Beigelman L;
XX
XX WPI; 2003-689777/65.
XX
XX New short interfering nucleic acid downregulates expression of the
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.
XX
XX Example 3; SEQ ID NO 10; 145pp; English.
XX
XX The invention relates to short interfering nucleic acids (siNA) which
XX downregulate expression of the one or more telomerase genes by RNA
XX interference. The siNAs may or may not comprise ribonucleotides and may
XX be double or single stranded. They further comprise sense and antisense
XX regions, or alternatively are assembled from a sense oligonucleotide and
XX an antisense oligonucleotide. Specifically, the siNAs include short
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
XX and can contain deoxyribonucleotides, and can be chemically synthesised,
XX expressed from a vector or enzymatically synthesised. The invention also
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates
XX and/or complexes of siNA; and vectors that express siNA. The siNAs are
XX used to modulate expression of the telomerase genes in cells, tissue
XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
XX transplants for the treatment of a variety of conditions. They may be
XX used for treating cancer, restenosis, infectious diseases (specifically
XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,
XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug
XX screening, diagnosis, therapeutic target identification and validation,
XX genetic engineering, pharmacogenomics, studying gene function, and gene
XX mapping (e.g., of single nucleotide polymorphisms). The present sequence
XX represents the upper strand of a human TERC-targeted double-stranded
XX siNA, which is identical to the c-fos transcript target sequence.
XX
XX Sequence 19 BP; 1 A; 5 C; 6 G; 0 T; 7 U; 0 Other;
XX
XX Query Match 4.2%; Score 19; DB 1; Length 19;
XX Best Local Similarity 63.2%; Pred. No. 1.5e+02;
XX Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 68 TAGCGCCGCTTGCTTGGCT 86
XX :|||||:|||||:
XX Db 1 UAGCGCCGCGUCUUGCU 19
XX
XX RESULT 217
XX ADF93546/c
XX ID ADF93546 standard; RNA; 19 BP.
XX
XX AC ADF93546;
XX
XX XX 26-FEB-2004 (first entry)
XX
XX DE Human TERC siNA lower strand, SEQ ID 273.
XX
XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;
XX neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;
XX antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;
XX RNA interference; short interfering nucleic acid; siNA;
XX short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
XX short hairpin RNA; shRNA; expression modulation; gene therapy;
XX drug screening; diagnosis; therapeutic target identification;
XX pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.
XX
XX OS Homo sapiens.
XX
XX XX WO2003070742-A1.
XX
XX PN 28-AUG-2003.
XX
XX PD 11-FEB-2003; 2003WO-US0004088.
XX
XX PF
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XX
XX 20-FEB-2002; 2002US-0358580P.
XX 11-MAR-2002; 2002US-0363124P.
XX 06-JUN-2002; 2002US-0386782P.
XX 17-JUL-2002; 2002US-0396600P.
XX 29-AUG-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J, Beigelman L;
XX WPI; 2003-689777/65.
XX
XX New short interfering nucleic acid downregulates expression of the
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.
XX
XX Example 3; SEQ ID NO 273; 145pp; English.
XX
XX The invention relates to short interfering nucleic acids (siNA) which
XX downregulate expression of the one or more telomerase genes by RNA
XX interference. The siNAs may or may not comprise ribonucleotides and may
XX be double or single stranded. They further comprise sense and antisense
XX regions, or alternatively are assembled from a sense oligonucleotide and
XX an antisense oligonucleotide. Specifically, the siNAs include short
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
XX and can contain deoxyribonucleotides, and can be chemically synthesised,
XX expressed from a vector or enzymatically synthesised. The invention also
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates
XX and/or complexes of siNA; and vectors that express siNA. The siNAs are
XX used to modulate expression of the telomerase genes in cells, tissue
XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
XX transplants for the treatment of a variety of conditions. They may be
XX used for treating cancer, restenosis, infectious diseases (specifically
XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,
XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug
XX screening, diagnosis, therapeutic target identification and validation,
XX genetic engineering, pharmacogenomics, studying gene function, and gene
XX mapping (e.g., of single nucleotide polymorphisms). The present sequence
XX represents the lower strand of a human TERC-targeted double-stranded
XX siNA.
XX
XX Sequence 19 BP; 3 A; 6 C; 5 G; 0 T; 5 U; 0 Other;
XX
XX Query Match 4.2%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 1.5e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 50 CCCTAACTGAGAGGGCGT 68
XX |||||:|||||:|||||
XX Db 19 CCCTAACTGAGAGGGCGT 1
XX
XX RESULT 218
XX ADF93562/c
XX ID ADF93562 standard; RNA; 19 BP.
XX
XX AC ADF93562;
XX
XX XX 26-FEB-2004 (first entry)
XX
XX DE Human TERC siNA lower strand, SEQ ID 289.
XX
XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;
XX neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;
XX antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;
XX RNA interference; short interfering nucleic acid; siNA;
XX short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
XX short hairpin RNA; shRNA; expression modulation; gene therapy;
XX pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.
XX
XX OS Homo sapiens.
XX
XX XX WO2003070742-A1.
XX
XX PN 28-AUG-2003.
XX
XX PD 11-FEB-2003; 2003WO-US0004088.
XX
XX PF
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KW drug screening; diagnosis; therapeutic target identification; pharmacogenomics; gene function analysis; gene mapping; TERC; TERC; ss.  
 XX Homo sapiens.  
 XX W02003070742-A1.  
 XX 28-AUG-2003.  
 XX 11-FEB-2003; 2003WO-US004088.  
 XX 20-FEB-2002; 2002US-0358580P.  
 XX 11-MAR-2002; 2002US-0363124P.  
 XX 06-JUN-2002; 2002US-0386782P.  
 XX 17-JUL-2002; 2002US-0396600P.  
 XX 29-AUG-2002; 2002US-0406784P.  
 XX 05-SEP-2002; 2002US-0408378P.  
 XX 09-SEP-2002; 2002US-0409293P.  
 XX 15-JAN-2003; 2003US-0440129P.  
 XX (RIBO-) RIBOZYME PHARM INC.  
 XX Mcswiggen J, Beigelman L;  
 XX WPI; 2003-689777/65.  
 XX New short interfering nucleic acid downregulates expression of the telomerase gene useful e.g. for treatment and diagnosis of cancer.  
 XX Example 3; SEQ ID NO 289; 145pp; English.  
 XX The invention relates to short interfering nucleic acids (siNA) which downregulate expression of the one or more telomerase genes by RNA interference. The siNAs may or may not comprise ribonucleotides and may be double or single stranded. They further comprise sense and antisense regions, or alternatively are assembled from a sense oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs include short interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified, can contain deoxyribonucleotides, and can be chemically synthesised, expressed from a vector or enzymatically synthesised. The invention also relates to kits for the in vitro or in vivo delivery of siNA; conjugates and/or complexes of siNA; and vectors that express siNA. The siNAs are explants or organisms (e.g., by ex vivo gene therapy), or in grafts and used for treating cancer, restenosis, infectious diseases (specifically protozoal), transplant rejection, or autoimmune or age-related diseases, e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration, skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug screening, diagnosis, therapeutic target identification and validation, genetic engineering, pharmacogenomics, studying gene function, and gene mapping (e.g., of single nucleotide polymorphisms). The present sequence represents the lower strand of a human TERC-targeted double-stranded siNA.  
 XX Sequence 19 BP; 2 A; 9 C; 5 G; 0 T; 3 U; 0 Other;  
 SQ Query Match 4.2%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 338 CGAGGGCGAGTTTCAGGCC 356  
 |||||  
 DB 19 CGAGGGCGAGTTTCAGGCC 1  
 RESULT 219  
 ADF93308  
 ID ADF93308 standard; RNA; 19 BP.  
 XX  
 AC ADF93308;  
 XX

DT 26-FEB-2004 (first entry)  
 XX Human TERC transcript target sequence/siNA upper strand, SEQ ID 25.  
 XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological; neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic; antiarthritic; antiinflammatory; gene therapy; telomerase; human; TERC; RNA interference; short interfering nucleic acid; siNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERC; ss.  
 XX Homo sapiens.  
 OS W02003070742-A1.  
 XX 28-AUG-2003.  
 XX 11-FEB-2003; 2003WO-US004088.  
 XX 20-FEB-2002; 2002US-0358580P.  
 XX 11-MAR-2002; 2002US-0363124P.  
 XX 06-JUN-2002; 2002US-0386782P.  
 XX 17-JUL-2002; 2002US-0396600P.  
 XX 29-AUG-2002; 2002US-0406784P.  
 XX 05-SEP-2002; 2002US-0408378P.  
 XX 09-SEP-2002; 2002US-0409293P.  
 XX 15-JAN-2003; 2003US-0440129P.  
 XX (RIBO-) RIBOZYME PHARM INC.  
 XX Mcswiggen J, Beigelman L;  
 XX WPI; 2003-689777/65.  
 XX New short interfering nucleic acid downregulates expression of the telomerase gene useful e.g. for treatment and diagnosis of cancer.  
 XX Example 3; SEQ ID NO 25; 145pp; English.  
 XX The invention relates to short interfering nucleic acids (siNA) which downregulate expression of the one or more telomerase genes by RNA interference. The siNAs may or may not comprise ribonucleotides and may be double or single stranded. They further comprise sense and antisense regions, or alternatively are assembled from a sense oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs include short interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified, can contain deoxyribonucleotides, and can be chemically synthesised, expressed from a vector or enzymatically synthesised. The invention also relates to kits for the in vitro or in vivo delivery of siNA; conjugates and/or complexes of siNA; and vectors that express siNA. The siNAs are explants or organisms (e.g., by ex vivo gene therapy), or in grafts and used to modulate expression of the telomerase genes in cells, tissue explants or organisms (e.g., by ex vivo gene therapy), or in grafts and transplants for the treatment of a variety of conditions. They may be used for treating cancer, restenosis, infectious diseases (specifically protozoal), transplant rejection, or autoimmune or age-related diseases, e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration, skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug screening, diagnosis, therapeutic target identification and validation, genetic engineering, pharmacogenomics, studying gene function, and gene mapping (e.g., of single nucleotide polymorphisms). The present sequence represents the upper strand of a human TERC-targeted double-stranded siNA, which is identical to the c-fos transcript target sequence.  
 XX Sequence 19 BP; 3 A; 5 C; 9 G; 0 T; 2 U; 0 Other;  
 SQ Query Match 4.2%; Score 19; DB 1; Length 19;  
 Best Local Similarity 89.5%; Pred. No. 1.5e+02;  
 Matches 17; Conservative 2; Mismatches 0; Indels 0; Gaps 0;  
 QY 338 CGAGGGCGAGTTTCAGGCC 356



Db 1 CGAGGCGGAGGUTACGCC 19  
|||||  
RESULT 220  
ADF93552/c  
ID ADF93552 standard; RNA; 19 BP.  
XX  
AC ADF93552;  
XX  
DT 26-FEB-2004 (first entry)  
XX  
DE Human TERC siNA lower strand, SEQ ID 279.  
XX  
KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
OS Homo sapiens.  
XX  
XX WO2003070742-A1.  
XX  
PD 28-AUG-2003.  
XX  
PF 11-FEB-2003; 2003WO-US004088.  
XX  
PR 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Mcswiggen J, Beigelman L;  
XX  
XX WPI; 2003-689777/65.  
XX  
PT New short interfering nucleic acid downregulates expression of the  
telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
PS Example 3; SEQ ID NO 279; 145pp; English.  
XX  
CC The invention relates to short interfering nucleic acids (siNA) which  
downregulate expression of the one or more telomerase genes by RNA  
interference. The siNAs may or may not comprise ribonucleotides and may  
be double or single stranded. They further comprise sense and antisense  
regions, or alternatively are assembled from a sense oligonucleotide and  
an antisense oligonucleotide. Specifically, the siNAs include short  
interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
can contain deoxyribonucleotides, and can be chemically synthesised,  
expressed from a vector or enzymatically synthesised. The invention also  
relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
and/or complexes of siNA; and vectors that express siNA. The siNAs are  
used to modulate expression of the telomerase genes in cells, tissue  
explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
transplants for the treatment of a variety of conditions. They may be  
used for treating cancer, restenosis, infectious diseases (specifically  
protozoal), transplant rejection, or autoimmune or age-related diseases,  
e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
screening, diagnosis, therapeutic target identification and validation,  
genetic engineering, pharmacogenomics, studying gene function, and gene  
mapping (e.g., of single nucleotide polymorphisms). The present sequence

CC represents the lower strand of a human TERC-targeted double-stranded  
CC siNA.  
XX  
SQ Sequence 19 BP; 3 A; 2 C; 3 G; 0 T; 11 U; 0 Other;  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 158 TTCTAGAGCAACAAAAA 176  
Db 19 TTCTAGAGCAACAAAAA 1  
RESULT 221  
ADF93566/c  
ID ADF93566 standard; RNA; 19 BP.  
XX  
AC ADF93566;  
XX  
DT 26-FEB-2004 (first entry)  
XX  
DE Human TERC siNA lower strand, SEQ ID 293.  
XX  
KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.  
OS Homo sapiens.  
XX  
XX WO2003070742-A1.  
XX  
PD 28-AUG-2003.  
XX  
PF 11-FEB-2003; 2003WO-US004088.  
XX  
PR 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 17-JUL-2002; 2002US-0396600P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
XX  
PI Mcswiggen J, Beigelman L;  
XX  
XX WPI; 2003-689777/65.  
XX  
PT New short interfering nucleic acid downregulates expression of the  
telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
PS Example 3; SEQ ID NO 293; 145pp; English.  
XX  
CC The invention relates to short interfering nucleic acids (siNA) which  
downregulate expression of the one or more telomerase genes by RNA  
interference. The siNAs may or may not comprise ribonucleotides and may  
be double or single stranded. They further comprise sense and antisense  
regions, or alternatively are assembled from a sense oligonucleotide and  
an antisense oligonucleotide. Specifically, the siNAs include short  
interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
can contain deoxyribonucleotides, and can be chemically synthesised,  
expressed from a vector or enzymatically synthesised. The invention also  
relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
and/or complexes of siNA; and vectors that express siNA. The siNAs are



used to modulate expression of the telomerase genes in cells, tissue explants or organisms (e.g., by ex vivo gene therapy), or in grafts and transplants for the treatment of a variety of conditions. They may be used for treating cancer, restenosis, infectious diseases (specifically protozoal), transplant rejection, or autoimmune or age-related diseases, e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration, skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug screening, diagnosis, therapeutic target identification and validation, genetic engineering, pharmacogenomics, studying gene function, and gene mapping (e.g., of single nucleotide polymorphisms). The present sequence represents the lower strand of a human TERC-targeted double-stranded siNA.

XX Sequence 19 BP; 4 A; 8 C; 4 G; 0 T; 3 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 1.5e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 410 CTGAGCTGTGGACGTGCA 428

Db 19 CTGAGCTGTGGACGTGCA 1

RESULT 222

ADF93296

ID ADF93296 standard; RNA; 19 BP.

XX

AC ADF93296;

XX

DT 26-FEB-2004 (first entry)

XX

DE Human TERC transcript target sequence/siNA upper strand, SEQ ID 13.

XX

Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological; neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic; antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc; RNA interference; short interfering nucleic acid; siNA; short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA; expression modulation; gene therapy; drug screening; diagnosis; therapeutic target identification; pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.

XX Homo sapiens.

OS

XX

PN WO2003070742-A1.

XX

PD 28-AUG-2003.

XX

PF 11-FEB-2003; 2003WO-US004088.

XX

PR 20-FEB-2002; 2002US-0358580P.

XX

PR 11-MAR-2002; 2002US-0363124P.

XX

PR 06-JUN-2002; 2002US-0386782P.

XX

PR 17-JUL-2002; 2002US-0396600P.

XX

PR 29-AUG-2002; 2002US-0406784P.

XX

PR 05-SEP-2002; 2002US-0408378P.

XX

PR 09-SEP-2002; 2002US-0409293P.

XX

PR 15-JAN-2003; 2003US-0440129P.

XX

PA (RIBO-) RIBOZYME PHARM INC.

XX

PI Mcswiggen J, Beigelman L;

XX

XX WPI; 2003-689777/65.

DR

XX New short interfering nucleic acid downregulates expression of the

PT telomerase gene useful e.g. for treatment and diagnosis of cancer.

XX

XX Example 3; SEQ ID NO 13; 145pp; English.

PS

XX The invention relates to short interfering nucleic acids (siNA) which

CC downregulate expression of the one or more telomerase genes by RNA

interference. The siNAs may or may not comprise ribonucleotides and may be double or single stranded. They further comprise sense and antisense regions, or alternatively are assembled from a sense oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs include short interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified, can contain deoxyribonucleotides, and can be chemically synthesised, expressed from a vector or enzymatically synthesised. The invention also relates to kits for the in vitro or in vivo delivery of siNA; conjugates and/or complexes of siNA; and vectors that express siNA. The siNAs are used to modulate expression of the telomerase genes in cells, tissue explants or organisms (e.g., by ex vivo gene therapy), or in grafts and transplants for the treatment of a variety of conditions. They may be used for treating cancer, restenosis, infectious diseases (specifically protozoal), transplant rejection, or autoimmune or age-related diseases, e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration, skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug screening, diagnosis, therapeutic target identification and validation, genetic engineering, pharmacogenomics, studying gene function, and gene mapping (e.g., of single nucleotide polymorphisms). The present sequence represents the upper strand of a human TERC-targeted double-stranded siNA, which is identical to the c-fos transcript target sequence.

XX Sequence 19 BP; 4 A; 6 C; 7 G; 0 T; 2 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;

Best Local Similarity 89.5%; Pred. No. 1.5e+02;

Matches 17; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 122 GCGGAAAAGCTCGGCGCTG 140

Db 1 GCGGAAAAGCTCGGCGCTG 19

RESULT 223

ADF93544/C

ID ADF93544 standard; RNA; 19 BP.

XX

AC ADF93544;

XX

DT 26-FEB-2004 (first entry)

XX

DE Human TERC siNA lower strand, SEQ ID 271.

XX

Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological; neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic; antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc; RNA interference; short interfering nucleic acid; siNA; short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA; expression modulation; gene therapy; drug screening; diagnosis; therapeutic target identification; pharmacogenomics; gene function analysis; gene mapping; TERC; TERT; ss.

XX Homo sapiens.

OS

XX

PN WO2003070742-A1.

XX

PD 28-AUG-2003.

XX

PF 11-FEB-2003; 2003WO-US004088.

XX

PR 20-FEB-2002; 2002US-0358580P.

XX

PR 11-MAR-2002; 2002US-0363124P.

XX

PR 06-JUN-2002; 2002US-0386782P.

XX

PR 17-JUL-2002; 2002US-0396600P.

XX

PR 29-AUG-2002; 2002US-0406784P.

XX

PR 05-SEP-2002; 2002US-0408378P.

XX

PR 09-SEP-2002; 2002US-0409293P.

XX

PR 15-JAN-2003; 2003US-0440129P.

XX

PA (RIBO-) RIBOZYME PHARM INC.

XX

PI Mcswiggen J, Beigelman L;



OS Homo sapiens.  
 XX WO2003070742-A1.  
 XX 28-AUG-2003.  
 XX 11-FEB-2003; 2003WO-US004088.  
 XX 20-FEB-2002; 2002US-0358580P.  
 PR 11-MAR-2002; 2002US-03631124P.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 17-JUL-2002; 2002US-0396600P.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 15-JAN-2003; 2003US-0440129P.  
 XX (RIBO-) RIBOZYME PHARM INC.  
 XX Mcswiggen J, Beigelman L;  
 PI WPI; 2003-689777/65.  
 XX New short interfering nucleic acid downregulates expression of the  
 PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
 XX Example 3; SEQ ID NO 286; 145pp; English.  
 XX The invention relates to short interfering nucleic acids (siNA) which  
 CC downregulate expression of the one or more telomerase genes by RNA  
 CC interference. The siNAs may or may not comprise ribonucleotides and may  
 CC be double or single stranded. They further comprise sense and antisense  
 CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
 CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents the lower strand of a human TERC-targeted double-stranded  
 CC siNA.  
 XX Sequence 19 BP; 1 A; 3 C; 10 G; 0 T; 5 U; 0 Other;  
 SQ Query Match 4.2%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Oy 284 CACCACCTGCCACCGCGAA 302  
 |||||  
 Db 19 CACCACCTGCCACCGCGAA 1  
 RESULT 226  
 ADO22919  
 ID ADO22919 standard; cDNA; 19 BP.  
 XX AC ADO22919;  
 XX DT 01-JUL-2004 (first entry)  
 XX DE Human telomerase RNA gene, SDO target region #4.

XX Human; ss; SDO; short double stranded oligonucleotide; cleavage site;  
 KW viral infection; malignant tumour; genetic disease; metabolic disease;  
 KW gene chip; protein chip; microarray; gene drug; Dermogene; Lungene;  
 KW Hepatogene; Leukogene; Lymphogene; Prostagene; Breastogene;  
 KW Braintumogene; Skin-whitogene; short interfering RNA; siRNA; cancer;  
 XX RNA interference.  
 XX Homo sapiens.  
 OS US2004072769-A1.  
 PN 15-APR-2004.  
 XX 16-SEP-2002; 2002US-00016490.  
 XX 16-SEP-2002; 2002US-00016490.  
 XX (YINJ/) YIN J Q.  
 PA Yin JQ;  
 PI WPI; 2004-355427/33.  
 XX Designing and selecting short double-stranded oligonucleotides for  
 PT treating viral infections, cancer and genetic or metabolic diseases,  
 PT comprises using gene chip and protein chip microarrays to identify  
 PT specific DNA sequences.  
 XX Claim 12; SEQ ID NO 8; 58pp; English.  
 PS The invention relates to screening, identifying or predicting, and  
 CC assembling 19-25 nt double-stranded oligonucleotides (termed short double  
 CC stranded oligonucleotides, SDO) as active pharmaceutical compositions  
 CC for the treatment of viral infections, malignant tumours, and genetic and  
 CC metabolic diseases, comprising screening and identifying a specific DNA  
 CC sequence in an abnormal gene encoding a protein with gene chip and  
 CC protein chip microarrays. The above method comprises screening the  
 CC disease-causing genes, over-expressing in cells and/or tissues, with the  
 CC gene chip and protein chip microarrays, identifying a specific DNA  
 CC sequence within the abnormal gene encoding a protein or playing other  
 CC biological roles with the assistance of computer and specific software,  
 CC predicting efficacious 19-25 nt double-stranded oligonucleotides with a  
 CC 5'-AU(T)CCG-3' or 5'-U(T)CCG-3' special pattern complementary to at  
 CC least a portion of an RNA molecule and making sure that selected sequence  
 CC is not localised within the stem-loop of target mRNA with any related  
 CC software. Also included are pharmaceutical compositions of gene drugs  
 CC (such as Dermogene, Lungene, Hepatogene, Leukogene, Lymphogene,  
 CC Prostagene, Breastogene, Braintumogene and Skin-whitogene including but  
 CC being not limited to part or all of the following components: single or a  
 CC group of specific 19-25 nt dRNA, 19-25 nt sRNA-cDNA, 19-25 nt dRNA  
 CC and/or single-stranded RNA and/or DNA with the special pattern, 5'-  
 CC CGAT(U)-3' or its derivatives, one or more nucleic acid condensation  
 CC agents (or none), one or more pharmaceutical carriers, one or more  
 CC specific cell-targeting proteins and other active agents and additional  
 CC materials) and a simplified method for predicting and selecting a  
 CC specific and efficacious small double-stranded oligonucleotides (SDSO),  
 CC antisense oligonucleotide molecules or short interfering RNA (siRNA)  
 CC (comprising identifying a special pattern that can be localised in any  
 CC position of an oligonucleotide sequence evaluating the specificity of a  
 CC selected sequence). The short interfering RNA (siRNA) are targeted  
 CC against genes involved in viral infection, malignant tumours, genetic and  
 CC metabolic diseases. The methods are useful for designing and selecting  
 CC short double-stranded oligonucleotides as a gene drug that can  
 CC specifically inactivate a group of corresponding genes. The composition  
 CC may be used for treating diseases or disorders associated with abnormal  
 CC expression of genes in cells or tissues of humans or animals, such as  
 CC viral infections, cancer, or genetic or metabolic diseases. The present  
 CC sequence is a target region for an SDO from an human cDNA.  
 XX Sequence 19 BP; 6 A; 4 C; 8 G; 1 T; 0 U; 0 Other;  
 SQ Query Match 4.2%; Score 19; DB 1; Length 19;

```
Best Local Similarity 100.0%; Pred. No. 1.5e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 372 AGAGGAACGGAGCGAGTCC 390
DB 1 AGAGGAACGGAGCGAGTCC 19

RESULT 227
ADO23063
ID ADO23063 standard; cDNA; 19 BP.
XX AC ADO23063;
XX DT 01-JUL-2004 (first entry)
XX DE Human telomerase RNA gene, SDO target region #3.
XX KW Human; ss; SDO; short double stranded oligonucleotide; cleavage site;
XX KW viral infection; malignant tumour; genetic disease; metabolic disease;
XX KW gene chip; protein chip; microarray; gene drug; Dermogene; Lungene;
XX KW Hepatogene; Leukogene; Lymphogene; Prostagene; Breastogene;
XX KW Braintumogene; Skin-whitogene; short interfering RNA; siRNA; cancer;
XX KW RNA interference.
XX OS Homo sapiens.
XX PN US2004072769-A1.
XX PD 15-APR-2004.
XX PF 16-SEP-2002; 2002US-00016490.
XX PR 16-SEP-2002; 2002US-00016490.
XX XX (YINJ/) YIN J Q.
XX YIN JQ;
XX WPI; 2004-355427/33.
XX Designing and selecting short double-stranded oligonucleotides for
XX treating viral infections, cancer and genetic or metabolic diseases,
XX comprises using gene chip and protein chip microarrays to identify
XX specific DNA sequences.
XX Example 1; Page 19; 58pp; English.
XX The invention relates to screening, identifying or predicting, and
XX assembling 19-25 nt double-stranded oligonucleotides (termed short double
XX stranded oligonucleotides, SDO) as active pharmaceutical compositions
XX for the treatment of viral infections, malignant tumours, and genetic and
XX metabolic diseases, comprising screening and identifying a specific DNA
XX sequence in an abnormal gene encoding a protein with gene chip and
XX protein chip microarrays. The above method comprises screening the
XX disease-causing genes, over-expressing in cells and/or tissues, with the
XX gene chip and protein chip microarrays, identifying a specific DNA
XX sequence within the abnormal gene encoding a protein or playing other
XX biological roles with the assistance of computer and specific software,
XX predicting efficacious 19-25 nt double-stranded oligonucleotides with a
XX 5'-AU(T)CCG-3' or 5'-U(T)CCCG-3' special pattern complementary to at
XX least a portion of an RNA molecule and making sure that selected sequence
XX is not localised within the stem-loop of target mRNA with any related
XX software. Also included are pharmaceutical compositions of gene drugs
XX (such as Dermogene, Lungene, Hepatogene, Leukogene, Lymphogene,
XX Prostagene, Breastogene, Braintumogene and Skin-whitogene including but
XX being not limited to part or all of the following components: single or a
XX group of specific 19-25 nt dsRNA, 19-25 nt srNA-cDNA, 19-25 nt dsRNA
XX and/or single-stranded RNA and/or DNA with the special pattern, 5'-
XX CCGAT(U)-3' or its derivatives, one or more nucleic acid condensation
XX agents (or none), one or more pharmaceutical carriers, one or more
XX specific cell-targeting proteins and other active agents and additional
XX materials) and a simplified method for predicting and selecting a
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specific and efficacious small double-stranded oligonucleotides (SDSO),
antisense oligonucleotide molecules or short interfering RNA (siRNA)
(comprising identifying a special pattern that can be localised in any
position of an oligonucleotide sequence evaluating the specificity of a
selected sequence). The short interfering RNA (siRNA) are targeted
against genes involved in viral infection, malignant tumours, genetic and
metabolic diseases. The methods are useful for designing and selecting
short double-stranded oligonucleotides as a gene drug that can
specifically inactivate a group of corresponding genes. The composition
may be used for treating diseases or disorders associated with abnormal
expression of genes in cells or tissues of humans or animals, such as
viral infections, cancer, or genetic or metabolic diseases. The present
sequence is a target region for an SDO from a human CDNA.
XX Sequence 19 BP; 3 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
XX Query Match 4.2%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 1.5e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 424 GTGCACCCAGGACTCGGCT 442
DB 1 GTGCACCCAGGACTCGGCT 19

RESULT 228
ADO23064
ID ADO23064 standard; cDNA; 19 BP.
XX AC ADO23064;
XX DT 01-JUL-2004 (first entry)
XX DE Human telomerase RNA gene, SDO target region #5.
XX KW Human; ss; SDO; short double stranded oligonucleotide; cleavage site;
XX KW viral infection; malignant tumour; genetic disease; metabolic disease;
XX KW gene chip; protein chip; microarray; gene drug; Dermogene; Lungene;
XX KW Hepatogene; Leukogene; Lymphogene; Prostagene; Breastogene;
XX KW Braintumogene; Skin-whitogene; short interfering RNA; siRNA; cancer;
XX KW RNA interference.
XX OS Homo sapiens.
XX PN US2004072769-A1.
XX PD 15-APR-2004.
XX PF 16-SEP-2002; 2002US-00016490.
XX PR 16-SEP-2002; 2002US-00016490.
XX XX (YINJ/) YIN J Q.
XX YIN JQ;
XX WPI; 2004-355427/33.
XX Designing and selecting short double-stranded oligonucleotides for
XX treating viral infections, cancer and genetic or metabolic diseases,
XX comprises using gene chip and protein chip microarrays to identify
XX specific DNA sequences.
XX Example 1; Page 19; 58pp; English.
XX The invention relates to screening, identifying or predicting, and
XX assembling 19-25 nt double-stranded oligonucleotides (termed short double
XX stranded oligonucleotides, SDO) as active pharmaceutical compositions
XX for the treatment of viral infections, malignant tumours, and genetic and
XX metabolic diseases, comprising screening and identifying a specific DNA
XX sequence in an abnormal gene encoding a protein with gene chip and
XX protein chip microarrays. The above method comprises screening the
XX disease-causing genes, over-expressing in cells and/or tissues, with the
XX gene chip and protein chip microarrays, identifying a specific DNA
XX sequence within the abnormal gene encoding a protein or playing other
XX biological roles with the assistance of computer and specific software,
XX predicting efficacious 19-25 nt double-stranded oligonucleotides with a
XX 5'-AU(T)CCG-3' or 5'-U(T)CCCG-3' special pattern complementary to at
XX least a portion of an RNA molecule and making sure that selected sequence
XX is not localised within the stem-loop of target mRNA with any related
XX software. Also included are pharmaceutical compositions of gene drugs
XX (such as Dermogene, Lungene, Hepatogene, Leukogene, Lymphogene,
XX Prostagene, Breastogene, Braintumogene and Skin-whitogene including but
XX being not limited to part or all of the following components: single or a
XX group of specific 19-25 nt dsRNA, 19-25 nt srNA-cDNA, 19-25 nt dsRNA
XX and/or single-stranded RNA and/or DNA with the special pattern, 5'-
XX CCGAT(U)-3' or its derivatives, one or more nucleic acid condensation
XX agents (or none), one or more pharmaceutical carriers, one or more
XX specific cell-targeting proteins and other active agents and additional
XX materials) and a simplified method for predicting and selecting a
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CC gene chip and protein chip microarrays, identifying a specific DNA  
 CC sequence within the abnormal gene encoding a protein or playing other  
 CC biological roles with the assistance of computer and specific software,  
 CC predicting efficacious 19-25 nt double-stranded oligonucleotides with a  
 CC 5'-AU(T)CCG-3' or 5'-U(T)CCG-3' special pattern complementary to at  
 CC least a portion of an RNA molecule and making sure that selected sequence  
 CC is not localised within the stem-loop of target mRNA with any related  
 CC software. Also included are pharmaceutical compositions of gene drugs  
 CC (such as Dermogene, Lungene, Hepatogene, Leukogene, Lymphogene,  
 CC Prostogene, Breastogene, Braintumogene and Skin-whitogene including but  
 CC being not limited to part or all of the following components: single or a  
 CC group of specific 19-25 nt dsRNA, 19-25 nt srna-cDNA, 19-25 nt dsRNA  
 CC and/or single-stranded RNA and/or DNA with the special pattern, 5'-  
 CC CGGAT(U)-3' or its derivatives, one or more nucleic acid condensation  
 CC agents (or none), one or more pharmaceutical carriers, one or more  
 CC specific cell-targeting proteins and other active agents and additional  
 CC materials) and a simplified method for predicting and selecting a  
 CC specific and efficacious small double-stranded oligonucleotides (SDSO),  
 CC antisense oligonucleotide molecules or short interfering RNA (siRNA)  
 CC (comprising identifying a special pattern that can be localised in any  
 CC position of an oligonucleotide sequence evaluating the specificity of a  
 CC selected sequence). The Short interfering RNA (siRNA) are targeted  
 CC against genes involved in viral infection, malignant tumours, genetic and  
 CC metabolic diseases. The methods are useful for designing and selecting  
 CC short double-stranded oligonucleotides as a gene drug that can  
 CC specifically inactivate a group of corresponding genes. The composition  
 CC may be used for treating diseases or disorders associated with abnormal  
 CC expression of genes in cells or tissues of humans or animals, such as  
 CC viral infections, cancer, or genetic or metabolic diseases. The present  
 CC sequence is a target region for an SDSO from an human cDNA.

XX Sequence 19 BP; 1 A; 2 C; 12 G; 4 T; 0 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 14 TGGGCTTGGGAGGGTGGT 32

Db 1 TGGGCTTGGGAGGGTGGT 19

RESULT 229

ADO23062

ID ADO23062 standard; cDNA; 19 BP.

AC ADO23062;

XX 01-JUL-2004 (first entry)

DE Human telomerase RNA gene, SDSO target region #2.

XX Human; ss; SDSO; short double stranded oligonucleotide; cleavage site;  
 KW viral infection; malignant tumour; genetic disease; metabolic disease;  
 KW gene chip; protein chip; microarray; gene drug; Dermogene; Lungene;  
 KW Hepatogene; Leukogene; Lymphogene; Prostogene; Breastogene;  
 KW Braintumogene; Skin-whitogene; short interfering RNA; siRNA; cancer;  
 KW RNA interference.

XX Homo sapiens.

OS US2004072769-A1.

FN 15-APR-2004.

XX 16-SEP-2002; 2002US-00016490.

PF 16-SEP-2002; 2002US-00016490.

XX (YINJ/) YIN J Q.

XX Yin JQ;

DR WPI; 2004-355427/33.

XX Designing and selecting short double-stranded oligonucleotides for  
 PT treating viral infections, cancer and genetic or metabolic diseases,  
 PT comprises using gene chip and protein chip microarrays to identify  
 PT specific DNA sequences.

XX Example 1; Page 19; 58pp; English.

XX The invention relates to screening, identifying or predicting, and  
 CC assembling 19-25 nt double-stranded oligonucleotides (termed short double  
 CC stranded oligonucleotides, SDSO) as active pharmaceutical compositions  
 CC for the treatment of viral infections, malignant tumours, and genetic and  
 CC metabolic diseases, comprising screening and identifying a specific DNA  
 CC sequence in an abnormal gene encoding a protein with gene chip and  
 CC protein chip microarrays. The above method comprises screening the  
 CC disease-causing genes, over-expressing in cells and/or tissues, with the  
 CC gene chip and protein chip microarrays, identifying a specific DNA  
 CC sequence within the abnormal gene encoding a protein or playing other  
 CC biological roles with the assistance of computer and specific software,  
 CC predicting efficacious 19-25 nt double-stranded oligonucleotides with a  
 CC 5'-AU(T)CCG-3' or 5'-U(T)CCG-3' special pattern complementary to at  
 CC least a portion of an RNA molecule and making sure that selected sequence  
 CC is not localised within the stem-loop of target mRNA with any related  
 CC software. Also included are pharmaceutical compositions of gene drugs  
 CC (such as Dermogene, Lungene, Hepatogene, Leukogene, Lymphogene,  
 CC Prostogene, Breastogene, Braintumogene and Skin-whitogene including but  
 CC being not limited to part or all of the following components: single or a  
 CC group of specific 19-25 nt dsRNA, 19-25 nt srna-cDNA, 19-25 nt dsRNA  
 CC and/or single-stranded RNA and/or DNA with the special pattern, 5'-  
 CC CGGAT(U)-3' or its derivatives, one or more nucleic acid condensation  
 CC agents (or none), one or more pharmaceutical carriers, one or more  
 CC specific cell-targeting proteins and other active agents and additional  
 CC materials) and a simplified method for predicting and selecting a  
 CC specific and efficacious small double-stranded oligonucleotides (SDSO),  
 CC antisense oligonucleotide molecules or short interfering RNA (siRNA)  
 CC (comprising identifying a special pattern that can be localised in any  
 CC position of an oligonucleotide sequence evaluating the specificity of a  
 CC selected sequence). The Short interfering RNA (siRNA) are targeted  
 CC against genes involved in viral infection, malignant tumours, genetic and  
 CC metabolic diseases. The methods are useful for designing and selecting  
 CC short double-stranded oligonucleotides as a gene drug that can  
 CC specifically inactivate a group of corresponding genes. The composition  
 CC may be used for treating diseases or disorders associated with abnormal  
 CC expression of genes in cells or tissues of humans or animals, such as  
 CC viral infections, cancer, or genetic or metabolic diseases. The present  
 CC sequence is a target region for an SDSO from an human cDNA.

XX Sequence 19 BP; 5 A; 6 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 19;  
 Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 116 CAGCGGGCGGAAAAGCCTC 134

Db 1 CAGCGGGCGGAAAAGCCTC 19

RESULT 230

ADO23065

ID ADO23065 standard; cDNA; 19 BP.

XX ADO23065;

XX 01-JUL-2004 (first entry)

DE Human telomerase RNA gene, SDSO target region #6.

XX Human; ss; SDSO; short double stranded oligonucleotide; cleavage site;  
 KW viral infection; malignant tumour; genetic disease; metabolic disease;  
 KW gene chip; protein chip; microarray; gene drug; Dermogene; Lungene;  
 KW Hepatogene; Leukogene; Lymphogene; Prostogene; Breastogene;

KW Brantumogene; Skin-whitogene; short interfering RNA; siRNA; cancer;  
KW RNA interference.  
XX Homo sapiens.  
XX US2004072769-A1.  
XX 15-APR-2004.  
XX 16-SEP-2002; 2002US-00016490.  
XX 16-SEP-2002; 2002US-00016490.  
XX (YINJ/) YIN J Q.  
XX Yin JQ;  
XX WPI; 2004-355427/33.  
XX Designing and selecting short double-stranded oligonucleotides for  
PT treating viral infections, cancer and genetic or metabolic diseases,  
PT comprises using gene chip and protein chip microarrays to identify  
PT specific DNA sequences.  
XX Example 1; Page 19; 58pp; English.  
XX The invention relates to screening, identifying or predicting, and  
CC assembling 19-25 nt double-stranded oligonucleotides (termed short double  
CC stranded oligonucleotides, SDO) as active pharmaceutical compositions  
CC for the treatment of viral infections, malignant tumours, and genetic and  
CC metabolic diseases, comprising screening and identifying a specific DNA  
CC sequence in an abnormal gene encoding a protein with gene chip and  
CC protein chip microarrays. The above method comprises screening the  
CC disease-causing genes, over-expressing in cells and/or tissues, with the  
CC gene chip and protein chip microarrays, identifying a specific DNA  
CC sequence within the abnormal gene encoding a protein or playing other  
CC biological roles with the assistance of computer and specific software,  
CC predicting efficacious 19-25 nt double-stranded oligonucleotides with a  
CC 5'-AU(T)CCG-3' or 5'-U(T)CCG-3' special pattern complementary to at  
CC least a portion of an RNA molecule and making sure that selected sequence  
CC is not localised within the stem-loop of target mRNA with any related  
CC software. Also included are pharmaceutical compositions of gene drugs  
CC (such as Dermogene, Lungene, Hepatogene, Leukogene, Lymphogene,  
CC Prostagene, Breastogene, Brantumogene and Skin-whitogene including but  
CC being not limited to part or all of the following components: single or a  
CC group of specific 19-25 nt dsRNA, 19-25 nt srNA-cDNA, 19-25 nt dsRNA  
CC and/or single-stranded RNA and/or DNA with the special pattern, 5'-  
CC CGAT(U)-3' or its derivatives, one or more nucleic acid condensation  
CC agents (or none), one or more pharmaceutical carriers, one or more  
CC specific cell-targeting proteins and other active agents and additional  
CC materials) and a simplified method for predicting and selecting a  
CC specific and efficacious small double-stranded oligonucleotides (SDSO),  
CC antisense oligonucleotide molecules or short interfering RNA (siRNA)  
CC (comprising identifying a special pattern that can be localised in any  
CC position of an oligonucleotide sequence evaluating the specificity of a  
CC selected sequence). The Short interfering RNA (siRNA) are targeted  
CC against genes involved in viral infection, malignant tumours, genetic and  
CC metabolic diseases. The methods are useful for designing and selecting  
CC short double-stranded oligonucleotides as a gene drug that can  
CC specifically inactivate a group of corresponding genes. The composition  
CC may be used for treating diseases or disorders associated with abnormal  
CC expression of genes in cells or tissues of humans or animals, such as  
CC viral infections, cancer, or genetic or metabolic diseases. The present  
CC sequence is a target region for an SDO from an human cDNA.  
XX Sequence 19 BP; 3 A; 13 C; 3 G; 0 T; 0 U; 0 Other;  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 230 CCAGCCCCCGAACCCGCC 248  
|||||

Db 1 CCAGCCCCCGAACCCGCC 19  
RESULT 231  
ADP27906  
ID ADP27906 standard; DNA; 19 BP.  
XX ADP27906;  
AC ADP27906;  
XX 26-AUG-2004 (first entry)  
XX PCR primer to amplify a human cancer prognostic marker DNA SeqID 343.  
DE human; primer; PCR; prognostic marker; EGFR;  
XX epidermal growth factor receptor; cancer; gene expression profiling;  
KW microarray; head and neck cancer; colon cancer; metastatic spread;  
KW neoplastic disease; ss.  
XX Homo sapiens.  
OS WO2004046386-A1.  
XX 03-JUN-2004.  
XX 14-NOV-2003; 2003WO-US036777.  
XX 15-NOV-2002; 2002US-0427090P.  
XX (GENO-) GENOMIC HEALTH INC.  
XX (VALU-) VALL HEBRON UNIV HOSPITAL.  
PI Baker JB, Cronin MT, Shak S, Baselga J;  
XX WPI; 2004-420643/39.  
XX Prognosing a patient with EGFR-expressing colon cancer comprises  
PT subjecting a sample comprising EGFR-expressing cancer cells to  
PT quantitative analysis of the expression level of the RNA transcript of at  
PT least one gene e.g., CD44v3.  
XX Claim 54; SEQ ID NO 343; 113pp; English.  
XX This invention relates to a novel method concerning prognostic markers  
CC associated with EGFR (epidermal growth factor receptor) positive cancer.  
CC Specifically, it refers to a gene expression profiling method that can  
CC provide a prediction as to whether a patient is likely to respond well to  
CC treatment with an EGFR inhibitor. The present invention describes the  
CC quantitative analysis of the expression level of the RNA transcript of at  
CC least one gene selected from the group of CD44v3, CD44v6, DR5, GRQ1,  
CC KRT17, LAMC2 or their products thereof. It further provides a cDNA  
CC microarray containing named genes that represent prognostic transcripts  
CC which are useful for determining whether a patient diagnosed with an EGFR  
CC -expressing head or neck cancer or colon cancer exhibits elevated or  
CC decreased expression levels of these genes compared to normal. As such,  
CC these methods are also useful for prognosing or predicting the likelihood  
CC of cancer-attributable death or progression, including recurrence and  
CC metastatic spread of a neoplastic disease, as well as drug resistance.  
CC This oligonucleotide sequence is a PCR primer used to amplify a human PCR  
CC amplicon DNA sequence used as a prognostic cancer marker, given in an  
CC exemplification of the invention.  
XX Sequence 19 BP; 7 A; 3 C; 8 G; 1 T; 0 U; 0 Other;  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 371 AAGAGGACGGACCGAGTC 389  
|||||  
Db 1 AAGAGGACGGACCGAGTC 19  
RESULT 232

ADP27907/c  
ID ADP27907 standard; DNA; 19 BP.  
XX  
XX AC ADP27907;  
XX  
XX DE 26-AUG-2004 (first entry)  
XX  
XX DE PCR primer to amplify a human cancer prognostic marker DNA SeqID 344.  
XX  
XX human; primer; PCR; prognostic marker; EGFR;  
KW epidermal growth factor receptor; cancer; gene expression profiling;  
KW microarray; head and neck cancer; colon cancer; metastatic spread;  
KW neoplastic disease; ss.  
XX  
XX Homo sapiens.  
OS  
XX WO2004046386-A1.  
XX  
XX 03-JUN-2004.  
XX  
XX 14-NOV-2003; 2003WO-US036777.  
XX  
XX 15-NOV-2002; 2002US-0427090P.  
XX  
XX (GENO-) GENOMIC HEALTH INC.  
PA (VALL-) VALL HEBRON UNIV HOSPITAL.  
XX  
XX Baker JB, Cronin MT, Shak S, Basella J;  
XX WPI; 2004-420643/39.  
XX  
XX Prognosing a patient with EGFR-expressing colon cancer comprises  
PT subjecting a sample comprising EGFR-expressing cancer cells to  
PT quantitative analysis of the expression level of the RNA transcript of at  
PT least one gene e.g., CD44v3.  
XX  
XX Claim 54; SEQ ID NO 344; 113pp; English.  
PS  
XX This invention relates to a novel method concerning prognostic markers  
XX associated with EGFR (epidermal growth factor receptor) positive cancer.  
XX Specifically, it refers to a gene expression profiling method that can  
XX provide a prediction as to whether a patient is likely to respond well to  
XX treatment with an EGFR inhibitor. The present invention describes the  
XX quantitative analysis of the expression level of the RNA transcript of at  
XX least one gene selected from the group of CD44v3, CD44v6, DR5, GROI,  
XX KRT17, LAMC2 or their products thereof. It further provides a cDNA  
XX microarray containing named genes that represent prognostic transcripts  
XX which are useful for determining whether a patient diagnosed with an EGFR  
XX -expressing head or neck cancer or colon cancer exhibits elevated or  
XX decreased expression levels of these genes compared to normal. As such,  
XX these methods are also useful for prognosing or predicting the likelihood  
XX of cancer-attributable death or progression, including recurrence and  
XX metastatic spread of a neoplastic disease, as well as drug resistance.  
XX This oligonucleotide sequence is a PCR primer used to amplify a human PCR  
XX amplicon DNA sequence used as a prognostic cancer marker, given in an  
XX exemplification of the invention.  
SQ Sequence 19 BP; 3 A; 4 C; 7 G; 5 T; 0 U; 0 Other;  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Oy 431 CAGGACTCGGCTCACACAT 449  
Db 19 CAGGACTCGGCTCACACAT 1  
RESULT 233  
ADP87877/c  
ID ADP87877 standard; DNA; 19 BP.  
XX  
XX AC ADP87877;  
XX  
XX DT 26-AUG-2004 (first entry)

XX  
XX 26-AUG-2004 (first entry)  
XX  
XX 2',5'-oligoadenylic acid analog related oligonucleotide #4.  
XX  
XX Cytostatic; virucide; 2'; 5'-oligoadenylic acid analog; antitumour;  
KW antiviral; cancer; ss.  
XX  
XX Synthetic.  
OS  
XX Key Location/Qualifiers  
FH modified\_base 1..5  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "2',4'-oxyethylene linkage in the sugar residues"  
FT modified\_base 6..15  
FT /\*tag= d  
FT /mod\_base= OTHER  
FT /note= "phosphorothioate backbone"  
FT modified\_base 15..19  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2',4'-oxyethylene linkage in the sugar residues"  
FT modified\_base 19  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "C-hydroxyethyl phosphate"  
XX  
XX WO2004046161-A1.  
XX  
XX 03-JUN-2004.  
XX  
XX 19-NOV-2003; 2003WO-JP014748.  
XX  
XX 19-NOV-2002; 2002JP-00334731.  
XX  
XX (SANY ) SANKYO CO LTD.  
XX  
XX Koizumi M, Morita K;  
XX WPI; 2004-460494/43.  
XX  
XX Stable 2',5'-oligoadenylic acid analogs containing natural and modified  
XX nucleic acid units as well as unusual phosphate groups with excellent  
XX activity particularly antitumor, applicable in cancer or antiviral  
XX therapy.  
XX  
XX Disclosure; Page 100; 220pp; Japanese.  
XX  
XX The present invention relates to novel 2',5'-oligoadenylic acid analogs  
XX and their pharmacologically- acceptable salts. The analogs are stable  
XX with superior antitumor and antiviral activity and so are useful in  
XX cancer or antiviral therapy e.g. as antisense drugs. The present sequence  
XX was used to illustrate the invention.  
XX  
XX Sequence 19 BP; 6 A; 5 C; 8 G; 0 T; 0 U; 0 Other;  
SQ  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Oy 76 GTGCTTTTGTCTCCCGCGC 94  
Db 19 GTGCTTTTGTCTCCCGCGC 1  
RESULT 234  
ADP87879/c  
ID ADP87879 standard; DNA; 19 BP.  
XX  
XX AC ADP87879;  
XX  
XX DT 26-AUG-2004 (first entry)



XX 2',5'-oligoadenylic acid analog related oligonucleotide #6.  
DE Cytostatic; virucide; 2'; 5'-oligoadenylic acid analog; antitumour;  
KW antiviral; cancer; ss.  
KW Synthetic.  
OS  
XX  
XX  
XX Key Location/Qualifiers  
FH modified\_base 1..19  
FT /\*tag= d  
FT /mod\_base= OTHER  
FT /note= "phosphorothioate backbone"  
FT modified\_base 1..5  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "2',4'-oxyethylene linkage in the sugar residues"  
FT modified\_base 15..19  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2',4'-oxyethylene linkage in the sugar residues"  
FT modified\_base 19  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "C-hydroxyethyl phosphate"  
XX  
XX WO2004046161-A1.  
PN  
XX  
XX 03-JUN-2004.  
XX  
XX 19-NOV-2003; 2003WO-JP014748.  
XX  
XX 19-NOV-2002; 2002JP-00334731.  
XX  
XX (SANY ) SANKYO CO LTD.  
XX  
XX Koizumi M, Morita K;  
XX WPI; 2004-460494/43.  
XX  
XX Stable 2',5'-oligoadenylic acid analogs containing natural and modified  
PT nucleic acid units as well as unusual phosphate groups with excellent  
PT activity particularly antitumor, applicable in cancer or antiviral  
PT therapy.  
XX  
XX Disclosure; Page 100-101; 220pp; Japanese.  
XX  
XX The present invention relates to novel 2',5'-oligoadenylic acid analogs  
CC and their pharmacologically- acceptable salts. The analogs are stable  
CC with superior antitumour and antiviral activity and so are useful in  
CC cancer or antiviral therapy e.g. as antisense drugs. The present sequence  
CC was used to illustrate the invention.  
XX  
XX Sequence 19 BP; 6 A; 5 C; 8 G; 0 T; 0 U; 0 Other;  
SQ  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 76 GTGCTTTTGTCTCCCGCGC 94  
DB 19 GTGCTTTTGTCTCCCGCGC 1  
RESULT 235  
ADP87880/C  
ID ADP87880 standard; DNA; 19 BP.  
XX  
XX ADP87880;  
AC  
XX 26-AUG-2004 (first entry)  
DT  
XX 2',5'-oligoadenylic acid analog related oligonucleotide #7.  
DE

XX Cytostatic; virucide; 2'; 5'-oligoadenylic acid analog; antitumour;  
KW antiviral; cancer; ss.  
XX Synthetic.  
OS  
XX  
XX Key Location/Qualifiers  
FH modified\_base 1..19  
FT /\*tag= d  
FT /mod\_base= OTHER  
FT /note= "phosphorothioate backbone"  
FT modified\_base 1..5  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "2',4'-oxyethylene linkage in the sugar residues"  
FT modified\_base 15..19  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2',4'-oxyethylene linkage in the sugar residues"  
FT modified\_base 19  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "C-hydroxyethyl phosphate"  
XX  
XX WO2004046161-A1.  
PN  
XX  
XX 03-JUN-2004.  
XX  
XX 19-NOV-2003; 2003WO-JP014748.  
XX  
XX 19-NOV-2002; 2002JP-00334731.  
XX  
XX (SANY ) SANKYO CO LTD.  
XX  
XX Koizumi M, Morita K;  
XX WPI; 2004-460494/43.  
XX  
XX Stable 2',5'-oligoadenylic acid analogs containing natural and modified  
PT nucleic acid units as well as unusual phosphate groups with excellent  
PT activity particularly antitumor, applicable in cancer or antiviral  
PT therapy.  
XX  
XX Disclosure; Page 101; 220pp; Japanese.  
XX  
XX The present invention relates to novel 2',5'-oligoadenylic acid analogs  
CC and their pharmacologically- acceptable salts. The analogs are stable  
CC with superior antitumour and antiviral activity and so are useful in  
CC cancer or antiviral therapy e.g. as antisense drugs. The present sequence  
CC was used to illustrate the invention.  
XX  
XX Sequence 19 BP; 6 A; 5 C; 8 G; 0 T; 0 U; 0 Other;  
SQ  
Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 76 GTGCTTTTGTCTCCCGCGC 94  
DB 19 GTGCTTTTGTCTCCCGCGC 1  
RESULT 236  
ADP87874/C  
ID ADP87874 standard; DNA; 19 BP.  
XX  
XX ADP87874;  
AC  
XX 26-AUG-2004 (first entry)  
DT  
XX 2',5'-oligoadenylic acid analog related oligonucleotide #1.  
DE  
XX Cytostatic; virucide; antitumour; antiviral; cancer; ss.  
KW



```

XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT modified_base 1..19
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "2',4'-oxyethylene linkage in the sugar residues"
XX FT modified_base 19
XX FT /*tag= b
XX FT /mod_base= OTHER
XX FT /note= "C-hydroxyethyl phosphate"
XX WO2004046161-A1.
XX 03-JUN-2004.
XX 19-NOV-2003; 2003WO-JP014748.
XX 19-NOV-2002; 2002JP-00334731.
XX (SANY ) SANKYO CO LTD.
XX Koizumi M, Morita K;
XX WPI; 2004-460494/43.
XX Stable 2',5'-oligoadenylic acid analogs containing natural and modified
XX nucleic acid units as well as unusual phosphate groups with excellent
XX activity particularly antitumor, applicable in cancer or antiviral
XX therapy.
XX Disclosure; Page 100; 220pp; Japanese.
XX PS The present invention relates to novel 2',5'-oligoadenylic acid analogs
XX and their pharmacologically- acceptable salts. The analogs are stable
XX with superior antitumor and antiviral activity and so are useful in
XX cancer or antiviral therapy e.g. as antisense drugs. The present sequence
XX was used to illustrate the invention.
XX SQ Sequence 19 BP; 6 A; 5 C; 8 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 4.2%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 1.5e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 76 GTGCTTTTGCTCCCGCGC 94
DB 19 GTGCTTTTGCTCCCGCGC 1
XX
RESULT 237
AAV68470/C
ID AAV68470 standard; DNA; 20 BP.
XX AC
XX AAV68470;
XX 22-MAR-1999 (first entry)
XX
XX Oligo contained activator-antisense complex spA12-anti-hTR.
XX
XX Human; telomerase; hTR; activator-antisense complex; malignant; enzyme;
XX cleave; brain; tumour malignant glioma; breast tumour; renal cell cancer;
XX melanoma; prostate cancer; leukemia; polychemia vera; myeloma; sarcoma;
XX Hodgkin's lymphoma; Waldenstrom's macroglobulinemia; heavy chain disease;
XX carcinoma; chemotherapeutic; antisense; ss.
XX OS
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX FT modified_base 1
XX FT /*tag= a

```

```

FT misc_feature /note= "Sp5'A(2'p5'A)11-Bu2"
FT 19..20
FT /*tag= b
FT /note= "3'-3' internucleotide linkage"
FT 20
FT /*tag= c
FT /note= "nucleotide in reverse orientation 3'-5'"
XX WO9847911-A1.
XX 29-OCT-1998.
XX 13-APR-1998; 98WO-US007397.
XX 21-APR-1997; 97US-0044507P.
XX 03-FEB-1998; 98US-00018125.
XX (CLEV-) CLEVELAND CLINIC FOUND.
XX (USSH ) US NAT INST OF HEALTH.
XX Silverman RH, Kondo S, Cowell JK, Li G, Torrence PF;
XX WPI; 1998-609972/51.
XX New RNase L activator-telomerase antisense complex - useful to inhibit
XX telomerase activity in telomerase-expressing malignancies.
XX Example; Page 53; 81pp; English.
XX This represents an antisense oligonucleotide to the RNA component of
XX human telomerase (hTR) comprised in the. The invention relates to an
XX activator-antisense complex that comprises: (a) an antisense oligo,
XX complementary to a 12-25 nucleotide portion of the RNA component of hTR,
XX with a hydroxyl moiety at the first end; and (b) a linker attached to the
XX first end, and (c) an activator of RNase L attached to the linker. The
XX activator-antisense complex may be used for inhibiting the growth of a
XX telomerase-expressing malignant cell or tumour. The complex is used to
XX specifically cleave the ribonucleotide portion of a telomerase enzyme.
XX The complex inhibits growth of telomerase expressing malignant cells from
XX brain tumour malignant glioma, breast tumour, renal cell cancer,
XX melanoma, and prostate cancer. Many other malignancies and related
XX disorders, may be treated including various acute and chronic leukemias,
XX myeloma, Waldenstrom's and non-Hodgkin's lymphomas, multiple
XX tumours, including numerous sarcomas and carcinomas. The complex is
XX preferably administered in combination with a chemotherapeutic agent,
XX particularly either cisplatin, doxorubicin, mitomycin, daunorubicin,
XX bleomycin, actinomycin D, or neocarzinostatin. The present sequence is an
XX example of a modified antisense oligo comprised in an activator-antisense
XX complex spA12-anti-hTR
XX
XX Sequence 20 BP; 6 A; 5 C; 8 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 4.2%; Score 19; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 1.6e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 76 GTGCTTTTGCTCCCGCGC 94
DB 19 GTGCTTTTGCTCCCGCGC 1
XX
RESULT 238
AAV68468/C
ID AAV68468 standard; DNA; 20 BP.
XX AC
XX AAV68468;
XX 22-MAR-1999 (first entry)
XX
XX Oligo contained activator-antisense complex spA4-anti-hTR.
XX Human; telomerase; hTR; activator-antisense complex; malignant; enzyme;

```

KW cleave; brain; tumour malignant glioma; breast tumour; renal cell cancer;  
KW melanoma; prostate cancer; leukemia; polychemia vera; myeloma; sarcoma;  
KW Hodgkin's lymphoma; Waldenstrom's macroglobulinemia; heavy chain disease;  
KW carcinoma; chemotherapeutic; antisense; ss.  
XX  
OS Synthetic.  
OS Homo sapiens.  
XX  
XX  
FH Key Location/Qualifiers  
FT misc\_feature 1..19 b  
FT /tag= b  
FT /note= "antisense oligo sequence claimed in claim 4"  
FT modified\_base 1  
FT /tag= a  
FT /note= "Sp5'A(2'p5'A)3-Bu2"  
FT misc\_feature 19..20 c  
FT /tag= c  
FT /note= "3'-3' internucleotide linkage"  
FT misc\_feature 20  
FT /tag= d  
FT /note= "nucleotide in reverse orientation 3'-5'"  
XX  
XX WO9847911-A1.  
XX  
XX 29-OCT-1998.  
XX  
XX 13-APR-1998; 98WO-US007397.  
XX  
XX 21-APR-1997; 97US-0044507P.  
PR 03-FEB-1998; 98US-00018125.  
XX  
XX (CLEV-) CLEVELAND CLINIC FOUND.  
PA (USSH ) US NAT INST OF HEALTH.  
XX  
XX Silverman RH, Kondo S, Cowell JK, Li G, Torrence PF;  
PI  
XX  
XX WPI; 1998-609972/51.  
XX  
XX  
XX New RNase L activator-telomerase antisense complex - useful to inhibit  
PT telomerase activity in telomerase-expressing malignancies.  
XX  
XX Claim 4; Page 45; 8lpp; English.  
XX  
XX This represents an antisense oligonucleotide to the RNA component of  
CC human telomerase (hTR) comprised in the. The invention relates to an  
CC activator-antisense complex that comprises: (a) an antisense oligo,  
CC complementary to a 12-25 nucleotide portion of the RNA component of hTR,  
CC with a hydroxyl moiety at the first end; and (b) a linker attached to the  
CC first end, and (c) an activator of RNase L attached to the linker. The  
CC activator-antisense complex may be used for inhibiting the growth of a  
CC telomerase-expressing malignant cell or tumour. The complex is used to  
CC specifically cleave the ribonucleotide portion of a telomerase enzyme.  
CC The complex inhibits growth of telomerase expressing malignant cells from  
CC brain tumour malignant glioma, breast tumour, renal cell cancer,  
CC melanoma, and prostate cancer. Many other malignancies and related  
CC disorders, may be treated including various acute and chronic leukemias,  
CC polychemia vera, Hodgkin's and non-Hodgkin's lymphomas, multiple  
CC myeloma, Waldenstrom's macroglobulinemia, heavy chain disease, and solid  
CC tumours, including numerous sarcomas and carcinomas. The complex is  
CC preferably administered in combination with a chemotherapeutic agent,  
CC particularly either cisplatin, doxorubicin, mitomycin, daunorubicin,  
CC bleomycin, actinomycin D, or neocarzinostatin. The present sequence is an  
CC example of a modified antisense oligo comprised in an activator-antisense  
CC complex spA4-anti-hTR  
XX  
SQ Sequence 20 BP; 6 A; 5 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 1.6e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 76 GTGCTTTTGTCTCCCGCGC 94  
|||||

Db 19 GTGCTTTTGTCTCCCGCGC 1  
RESULT 239  
ACC57540  
ID ACC57540 standard; DNA; 21 BP.  
XX  
XX ACC57540;  
XX  
XX 28-JUL-2003 (first entry)  
XX  
DE Short interfering RNA hTR#2 siRNA, targets telomerase RNA.  
XX  
KW RNA interference; short interfering RNA; siRNA; telomerase; cancer;  
KW tumour; cytostatic; contraceptive; immunosuppressive; antifertility;  
KW fungicide; antiparasitic; antiinflammatory; human; gene therapy; ds.  
XX  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT misc\_feature 1..19 b  
FT /tag= b  
FT /note= "double-stranded region, specifically referred to  
FT in Claim 11"  
FT misc\_feature 1  
FT /tag= a  
FT /label= Sticky\_end  
FT /note= "the 3'-end of the complementary strand overhangs  
FT the 5' end of this strand by the sequence 5'-TT-3'"  
FT misc\_feature 20..21 c  
FT /tag= c  
FT /label= Sticky\_end  
XX  
XX WO2003034985-A2.  
XX  
XX 01-MAY-2003.  
XX  
XX 16-OCT-2002; 2002WO-US033146.  
XX  
XX 22-OCT-2001; 2001US-0345326P.  
PR 20-FEB-2002; 2002US-0359196P.  
PR 22-MAY-2002; 2002US-0383195P.  
XX  
XX (UYRP ) UNIV ROCHESTER.  
XX  
XX Rowley PT;  
XX  
XX WPI; 2003-403289/38.  
XX  
XX Novel nucleic acid encoding or comprising interfering RNAs which target  
PT telomerase RNA, useful for inhibiting telomerase activity for treating  
PT cancer, infertility and disorders of the immune system.  
XX  
XX Claim 11; Page 13; 52pp; English.  
XX  
XX The present sequence is that of a short interfering RNA, denoted hTR#2  
CC siRNA, a 19 bp sequence centred in the 26 bp loop in the longest single-  
CC stranded region of human telomerase RNA. The siRNA comprises sense and  
CC antisense nucleic acids that are complementary to each other except for 2  
CC thymidine deoxynucleotides at both 3' overhangs. A nucleic acid  
CC comprising the double-stranded region of this siRNA is specifically  
CC claimed. The invention relates to the discovery that double-stranded  
CC interfering RNAs which target telomerase RNA, or mRNA encoding telomerase  
CC reverse transcriptase (hTERT), are capable of inhibiting telomerase  
CC activity. Inhibition of telomerase in cancer cells leads to telomere  
CC shortening, end-to-end chromosomal fusion, and apoptosis. Interference of  
CC telomerase activity can also be used for treatment of infertility, for  
CC contraception or sterilisation, for immunosuppression, for treatment of  
CC yeast, parasite and fungal infections, and in antiinflammatory therapies.  
CC As telomerase is active in a limited number of cell types, e.g. tumour  
CC cells, germline cells, certain stem cells of the haematopoietic system, T  
CC and B cells, sun-damaged skin, and proliferative cervix, most normal  
CC cells are not affected by telomerase RNA interference therapy

```
XX SQ Sequence 21 BP; 2 A; 8 C; 6 G; 5 T; 0 U; 0 Other;
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 270 GGCTTCTCCGAGGACCC 288
Db 1 GGCTTCTCCGAGGACCC 19

RESULT 240
ACCS7539
ID ACCS7539 standard; DNA; 21 BP.
XX AC
XX ACCS7539;
XX
DT 28-JUL-2003 (first entry)
DE Short interfering RNA HTR#1 siRNA, targets telomerase RNA.
XX
XX RNA interference; short interfering RNA; siRNA; telomerase; cancer;
XX tumour; cytostatic; contraceptive; immunosuppressive; antiinfertility;
XX fungicide; antiparasitic; antiinflammatory; human; gene therapy;
XX DNA-RNA hybrid; ds.
XX
OS Synthetic.
XX
XX Key Location/Qualifiers
FH misc_feature 1..19
FT /tag= b
FT /note= "double-stranded region, specifically referred to
FT in Claim 10"
FT misc_feature 1
FT /tag= a
FT /label= Sticky_end
FT /note= "the 3' end of the complementary strand overhangs
FT the 5' end of this strand by the sequence 5'-TT-3'"
FT misc_feature 20..21
FT /tag= C
FT /label= Sticky_end
XX
XX WO2003034985-A2.
XX
XX 01-MAY-2003.
XX
XX 16-OCT-2002; 2002WO-US033146.
XX
XX 22-OCT-2001; 2001US-0345326P.
XX 20-FEB-2002; 2002US-0359196P.
XX 22-MAY-2002; 2002US-0383195P.
XX
XX (UVRP ) UNIV ROCHESTER.
XX
XX Rowley PT;
XX
XX WPT; 2003-403289/38.
XX
XX Novel nucleic acid encoding or comprising interfering RNAs which target
XX telomerase RNA, useful for inhibiting telomerase activity for treating
XX cancer, infertility and disorders of the immune system.
XX
XX Claim 10; Page 13; 52pp; English.
XX
XX The present sequence is that of a short interfering RNA, denoted HTR#1
XX siRNA, which targets the template region (see ACCS7538) of human
XX telomerase RNA. The siRNA comprises sense and antisense nucleic acids
XX that are complementary to each other except for 2 thymidine
XX deoxynucleotides at both 3' overhangs. A nucleic acid comprising the
XX double-stranded region of this siRNA is specifically claimed. The
XX invention relates to the discovery that double-stranded interfering RNAs
XX which target telomerase RNA, or mRNA encoding telomerase reverse
```

```
CC transcriptase (TERT), are capable of inhibiting telomerase activity.
CC inhibition of telomerase in cancer cells leads to telomere shortening,
CC end-to-end chromosomal fusion, and apoptosis. Interference of telomerase
CC activity can also be used for treatment of infertility, for contraception
CC or sterilisation, for immunosuppression, for treatment of yeast, parasite
CC and fungal infections, and in antiinflammatory therapies. As telomerase
CC is active in a limited number of cell types, e.g. tumour cells, germline
CC cells, certain stem cells of the haematopoietic system, T and B cells,
CC sun-damaged skin, and proliferative cervix, most normal cells are not
CC affected by telomerase RNA interference therapy
XX
XX SQ Sequence 21 BP; 5 A; 5 C; 3 G; 2 T; 6 U; 0 Other;
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 68.4%; Pred. No. 1.7e+02;
Matches 13; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGCTTAACCCCTAAGCTGAG 60
Db 1 UUGUCUAAACCCUACUGAG 19

RESULT 241
ADFP3815/C
ID ADFP3815 standard; RNA; 21 BP.
XX AC
XX ADFP3815;
XX
DT 26-FEB-2004 (first entry)
DE Human TERC chemically modified siRNA, SEQ ID 542.
XX
XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;
XX neuroprotective; anti-HIV; ophthalmological; antitumor; antirheumatic;
XX antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;
XX RNA interference; short interfering nucleic acid; siRNA;
XX short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
XX short hairpin RNA; shRNA; expression modulation; gene therapy;
XX drug screening; diagnosis; therapeutic target identification;
XX pharmacogenomics; gene function analysis; gene mapping; TERC; TERC;
XX DNA-RNA hybrid; ss.
XX
XX Synthetic.
XX
XX OS Homo sapiens.
XX
XX Key Location/Qualifiers
FH modified_base 20..21
FT /tag= a
FT /mod_base= OTHER
FT /note= "Ribothymidines"
XX
XX WO2003070742-A1.
XX
XX 28-AUG-2003.
XX
XX 11-FEB-2003; 2003WO-US004088.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX 11-MAR-2002; 2002US-0363124P.
XX 06-JUN-2002; 2002US-0386782P.
XX 17-JUL-2002; 2002US-0396600P.
XX 29-AUG-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Mcswiggen J, Beigelman L;
XX
XX WPT; 2003-689777/65.
XX
XX New short interfering nucleic acid downregulates expression of the
```

telomerase gene useful e.g. for treatment and diagnosis of cancer.

Example 3; SEQ ID NO 542; 145pp; English.

The invention relates to short interfering nucleic acids (siNA) which downregulate expression of the one or more telomerase genes by RNA interference. The siNAs may or may not comprise ribonucleotides and may be double or single stranded. They further comprise sense and antisense regions, or alternatively are assembled from a sense oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs include short interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified, can contain deoxyribonucleotides, and can be chemically synthesised, expressed from a vector or enzymatically synthesised. The invention also relates to kits for the in vitro or in vivo delivery of siNA; conjugates and/or complexes of siNA; and vectors that express siNA. The siNAs are used to modulate expression of the telomerase genes in cells, tissue explants or organisms (e.g., by ex vivo gene therapy), or in grafts and transplants for the treatment of a variety of conditions. They may be used for treating cancer, restenosis, infectious diseases (specifically protozoal), transplant rejection, or autoimmune or age-related diseases, e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration, skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug screening, diagnosis, therapeutic target identification and validation, genetic engineering, pharmacogenomics, studying gene function, and gene mapping (e.g., of single nucleotide polymorphisms). The present sequence represents a chemically modified siRNA targeted to the human TERC mRNA transcript.

Sequence 21 BP; 7 A; 2 C; 6 G; 2 T; 4 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 146 TTCACCGTTCATTCTAGA 164  
|||||  
Db 19 TTCACCGTTCATTCTAGA 1

RESULT 242  
ADF93824/c

ID ADF93824 standard; RNA; 21 BP.

AC ADF93824;

DT 26-FEB-2004 (first entry)

DE Human TERC chemically modified siRNA, SEQ ID 551.

KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERC;  
KW DNA-RNA hybrid; ss.

OS Synthetic.

OS Homo sapiens.

XX

Key Location/Qualifiers

modified\_base 1..21  
/\*tag= b  
/mod\_base= OTHER  
/note= "Pyrimidine bases are 2'-deoxy-2'-fluoro"

modified\_base 20..21  
/\*tag= a  
/mod\_base= OTHER  
/note= "Ribothymidines. Also, the internucleotide linkage is phosphorothioate"

XX WO2003070742-A1.

PN

XX

PD 28-AUG-2003.

XX

PF 11-FEB-2003; 2003WO-US0004088.

XX

PR 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 17-JUL-2002; 2002US-0396600P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

PA

XX Mcswiggen J, Beigelman J;

PI

XX WPI; 2003-689777/65.

DR

XX New short interfering nucleic acid downregulates expression of the telomerase gene useful e.g. for treatment and diagnosis of cancer.

PT

XX

PS Example 3; SEQ ID NO 551; 145pp; English.

XX

CC The invention relates to short interfering nucleic acids (siNA) which downregulate expression of the one or more telomerase genes by RNA interference. The siNAs may or may not comprise ribonucleotides and may be double or single stranded. They further comprise sense and antisense regions, or alternatively are assembled from a sense oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs include short interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified, can contain deoxyribonucleotides, and can be chemically synthesised, expressed from a vector or enzymatically synthesised. The invention also relates to kits for the in vitro or in vivo delivery of siNA; conjugates and/or complexes of siNA; and vectors that express siNA. The siNAs are used to modulate expression of the telomerase genes in cells, tissue explants or organisms (e.g., by ex vivo gene therapy), or in grafts and transplants for the treatment of a variety of conditions. They may be used for treating cancer, restenosis, infectious diseases (specifically protozoal), transplant rejection, or autoimmune or age-related diseases, e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration, skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug screening, diagnosis, therapeutic target identification and validation, genetic engineering, pharmacogenomics, studying gene function, and gene mapping (e.g., of single nucleotide polymorphisms). The present sequence represents a chemically modified siRNA targeted to the human TERC mRNA transcript.

XX

SQ Sequence 21 BP; 5 A; 3 C; 7 G; 2 T; 4 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 148 CCACCGTTCATTCTAGAC 166  
|||||  
Db 19 CCACCGTTCATTCTAGAC 1

RESULT 243  
ADF93831/c

ID ADF93831 standard; RNA; 21 BP.

XX

AC ADF93831;

XX

DT 26-FEB-2004 (first entry)

XX

DE Human TERC chemically modified siRNA, SEQ ID 558.

XX

KW Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siRNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT;  
KW DNA-RNA hybrid; ss.  
OS Synthetic.  
OS Homo sapiens.  
XX  
XX  
FH Key Location/Qualifiers  
FT 1. .21  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "Pyrimidine bases are 2'-deoxy-2'-fluoro and  
FT purines are Deoxy bases"  
FT modified\_base  
FT 20. .21  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Ribothymidines. Also, the internucleotide linkage  
FT is phosphorothioate"  
XX  
PN WO2003070742-A1.  
XX  
XX 28-AUG-2003.  
XX  
XX 11-FEB-2003; 2003WO-US004088.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
XX 11-MAR-2002; 2002US-0363124P.  
XX 06-JUN-2002; 2002US-0386782P.  
XX 17-JUL-2002; 2002US-0396600P.  
XX 29-AUG-2002; 2002US-0406784P.  
XX 05-SEP-2002; 2002US-0408378P.  
XX 09-SEP-2002; 2002US-0409293P.  
XX 15-JAN-2003; 2003US-0440129P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Mcswiggen J, Beigelman L;  
XX WPI; 2003-689777/65.  
XX  
XX New short interfering nucleic acid downregulates expression of the  
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
XX Example 3; SEQ ID NO 558; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which  
XX downregulate expression of the one or more telomerase genes by RNA  
XX interference. The siNAs may or may not comprise ribonucleotides and may  
XX be double or single stranded. They further comprise sense and antisense  
XX regions, or alternatively are assembled from a sense oligonucleotide and  
XX an antisense oligonucleotide. Specifically, the siNAs include short  
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
XX can contain deoxyribonucleotides, and can be chemically synthesised,  
XX expressed from a vector or enzymatically synthesised. The invention also  
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
XX and/or complexes of siNA; and vectors that express siNA. The siNAs are  
XX used to modulate expression of the telomerase genes in cells, tissue  
XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
XX transplants for the treatment of a variety of conditions. They may be  
XX used for treating cancer, restenosis, infectious diseases (specifically  
XX protozoal), transplant rejection, or autoimmune or age-related diseases,  
XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
XX screening, diagnosis, therapeutic target identification and validation,  
XX genetic engineering, pharmacogenomics, studying gene function, and gene  
XX mapping (e.g., of single nucleotide polymorphisms). The present sequence

CC represents a chemically modified siRNA targeted to the human TERC mRNA  
CC transcript.  
XX  
XX Sequence 21 BP; 7 A; 2 C; 6 G; 2 T; 4 U; 0 Other;  
SQ Query Match 4.2%; Score 19; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 146 TTCCACCGTTCATTCTAGA 164  
Db 19 TTCCACCGTTCATTCTAGA 1  
RESULT 244  
ADP93812  
ID ADP93812 standard; RNA; 21 BP.  
XX  
XX ADF93812;  
AC ADF93812;  
XX  
XX 26-FEB-2004 (first entry)  
XX  
XX Human TERC chemically modified siRNA, SEQ ID 539.  
XX  
XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT;  
KW DNA-RNA hybrid; ss.  
XX  
XX Synthetic.  
OS Homo sapiens.  
XX  
XX  
FH Key Location/Qualifiers  
FT modified\_base 20. .21  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Ribothymidines"  
FT  
FT  
FT  
FT  
PN WO2003070742-A1.  
XX  
XX 28-AUG-2003.  
XX  
XX 11-FEB-2003; 2003WO-US004088.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
XX 11-MAR-2002; 2002US-0363124P.  
XX 06-JUN-2002; 2002US-0386782P.  
XX 17-JUL-2002; 2002US-0396600P.  
XX 29-AUG-2002; 2002US-0406784P.  
XX 05-SEP-2002; 2002US-0408378P.  
XX 09-SEP-2002; 2002US-0409293P.  
XX 15-JAN-2003; 2003US-0440129P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Mcswiggen J, Beigelman L;  
XX WPI; 2003-689777/65.  
XX  
XX New short interfering nucleic acid downregulates expression of the  
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
XX Example 3; SEQ ID NO 539; 145pp; English.  
XX  
XX The invention relates to short interfering nucleic acids (siNA) which  
XX downregulate expression of the one or more telomerase genes by RNA  
XX interference. The siNAs may or may not comprise ribonucleotides and may  
XX be double or single stranded. They further comprise sense and antisense  
XX regions, or alternatively are assembled from a sense oligonucleotide and  
XX an antisense oligonucleotide. Specifically, the siNAs include short  
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
XX can contain deoxyribonucleotides, and can be chemically synthesised,  
XX expressed from a vector or enzymatically synthesised. The invention also  
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
XX and/or complexes of siNA; and vectors that express siNA. The siNAs are  
XX used to modulate expression of the telomerase genes in cells, tissue  
XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
XX transplants for the treatment of a variety of conditions. They may be  
XX used for treating cancer, restenosis, infectious diseases (specifically  
XX protozoal), transplant rejection, or autoimmune or age-related diseases,  
XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
XX screening, diagnosis, therapeutic target identification and validation,  
XX genetic engineering, pharmacogenomics, studying gene function, and gene  
XX mapping (e.g., of single nucleotide polymorphisms). The present sequence

CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siRNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siRNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siRNA; conjugates  
 CC and/or complexes of siRNA; and vectors that express siRNA. The siRNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siRNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents a chemically modified siRNA targeted to the human TERC mRNA  
 CC transcript.

XX Sequence 21 BP; 4 A; 7 C; 3 G; 2 T; 5 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 21;

Best Local Similarity 73.7%; Pred. No. 1.7e+02;

Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

Qy 148 CCACCGTTCATTTAGAGC 166

|||||:|||||

Db 1 CCACCGUUCUUCUAGAGC 19

RESULT 245

ADF93825/c

ID ADF93825 standard; RNA; 21 BP.

XX AC ADF93825;

XX DT 26-FEB-2004 (first entry)

XX Human TERC chemically modified siRNA, SEQ ID 552.

XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
 KW RNA interference; short interfering nucleic acid; siRNA;  
 KW Short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT;  
 KW DNA-RNA hybrid; ss.

XX Synthetic.

OS Homo sapiens.

XX Key

PH modified\_base 1..21 Location/Qualifiers

FT /\*tag= b

FT /mod\_base= OTHER

FT /note= "Pyrimidine bases are 2'-deoxy-2'-fluoro"

FT modified\_base 20..21

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "Ribothymidines. Also, the internucleotide linkage  
 is phosphorothioate"

XX WO2003070742-A1.

XX 28-AUG-2003.

XX 11-FEB-2003; 2003WO-US004088.

XX 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.  
 PR 06-JUN-2002; 2002US-0386782P.  
 PR 17-JUL-2002; 2002US-0396600P.  
 PR 29-AUG-2002; 2002US-0406784P.  
 PR 05-SEP-2002; 2002US-0408378P.  
 PR 09-SEP-2002; 2002US-0409293P.  
 PR 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Beigelman L;

XX WPI; 2003-689777/65.

XX New short interfering nucleic acid downregulates expression of the  
 PT telomerase gene useful e.g. for treatment and diagnosis of cancer.

PS Example 3; SEQ ID NO 552; 145pp; English.

XX The invention relates to short interfering nucleic acids (siRNA) which  
 CC downregulate expression of the one or more telomerase genes by RNA  
 CC interference. The siRNAs may or may not comprise ribonucleotides and may  
 CC be double or single stranded. They further comprise sense and antisense  
 CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siRNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siRNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siRNA; conjugates  
 CC and/or complexes of siRNA; and vectors that express siRNA. The siRNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siRNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents a chemically modified siRNA targeted to the human TERC mRNA  
 CC transcript.

XX Sequence 21 BP; 5 A; 7 C; 3 G; 2 T; 4 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 21;

Best Local Similarity 100.0%; Pred. No. 1.7e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 300 GAAGAGTTGGCTCTGTCA 318

|||||:|||||

Db 19 GAAGAGTTGGCTCTGTCA 1

RESULT 246

ADF93817/c

ID ADF93817 standard; RNA; 21 BP.

XX AC ADF93817;

XX 26-FEB-2004 (first entry)

XX Human TERC chemically modified siRNA, SEQ ID 544.

XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
 KW RNA interference; short interfering nucleic acid; siRNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT;



CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siRNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents a chemically modified siRNA targeted to the human TERC mRNA  
 XX transcript.

SQ Sequence 21 BP; 5 A; 3 C; 7 G; 2 T; 4 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 148 CCACCGTTCATTCAGAGC 166  
 Db 19 CCACCGTTCATTCAGAGC 1

RESULT 248

ADF93811  
 ID ADF93811 standard; RNA; 21 BP.

AC ADF93811;

XX 26-FEB-2004 (first entry)

DT Human TERC chemically modified siRNA, SEQ ID 538.

DE Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 XX neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
 KW RNA interference; short interfering nucleic acid; siRNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT;  
 KW DNA-RNA hybrid; ss.

XX Synthetic.

OS Homo sapiens.

XX Key Location/Qualifiers  
 FH modified\_base 20..21  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "Ribothymidines"

XX WO2003070742-A1.

XX 28-AUG-2003.

XX 11-FEB-2003; 2003WO-US004088.

XX 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 17-JUL-2002; 2002US-0396600P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Meswiggen J, Beigelman L;

XX WPI; 2003-689777/65.

XX

XX New short interfering nucleic acid downregulates expression of the  
 PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
 PS Example 3; SEQ ID NO 538; 145pp; English.

XX The invention relates to short interfering nucleic acids (siNA) which  
 CC downregulate expression of the one or more telomerase genes by RNA  
 CC interference. The siNAs may or may not comprise ribonucleotides and may  
 CC be double or single stranded. They further comprise sense and antisense  
 CC regions, or alternatively are assembled from a sense oligonucleotide and  
 CC an antisense oligonucleotide. Specifically, the siNAs include short  
 CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
 CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
 CC can contain deoxyribonucleotides, and can be chemically synthesised,  
 CC expressed from a vector or enzymatically synthesised. The invention also  
 CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
 CC and/or complexes of siNA; and vectors that express siNA. The siNAs are  
 CC used to modulate expression of the telomerase genes in cells, tissue  
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
 CC transplants for the treatment of a variety of conditions. They may be  
 CC used for treating cancer, restenosis, infectious diseases (specifically  
 CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
 CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
 CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
 CC screening, diagnosis, therapeutic target identification and validation,  
 CC genetic engineering, pharmacogenomics, studying gene function, and gene  
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
 CC represents a chemically modified siRNA targeted to the human TERC mRNA  
 CC transcript.

XX Sequence 21 BP; 4 A; 6 C; 2 G; 2 T; 7 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 21;  
 Best Local Similarity 63.2%; Pred. No. 1.7e+02;  
 Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

QY 146 TTCACCGTTCATTCAGAGC 164  
 Db 1 UUCGACCGUUCUUCUAGA 19

RESULT 249

ADF93813

ID ADF93813 standard; RNA; 21 BP.

XX ADF93813;

XX 26-FEB-2004 (first entry)

DE Human TERC chemically modified siRNA, SEQ ID 540.

XX Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;  
 KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
 KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
 KW RNA interference; short interfering nucleic acid; siNA;  
 KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
 KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
 KW drug screening; diagnosis; therapeutic target identification;  
 KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERT;  
 KW DNA-RNA hybrid; ss.

XX Synthetic.

OS Homo sapiens.

XX Key Location/Qualifiers

FT modified\_base 20..21 a

FT /\*tag=

FT /mod\_base= OTHER

FT /note= "Ribothymidines"

XX WO2003070742-A1.



PD 28-AUG-2003.

XX 11-FEB-2003; 2003WO-US004088.

XX 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 17-JUL-2002; 2002US-0396600P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Beigelman J;

PI WPI; 2003-689777/65.

DR New short interfering nucleic acid downregulates expression of the

XX telomerase gene useful e.g. for treatment and diagnosis of cancer.

PS Example 3; SEQ ID NO 540; 145pp; English.

XX The invention relates to short interfering nucleic acids (siNA) which

CC downregulate expression of the one or more telomerase genes by RNA

CC interference. The siNAs may or may not comprise ribonucleotides and may

CC be double or single stranded. They further comprise sense and antisense

CC regions, or alternatively are assembled from a sense oligonucleotide and

CC an antisense oligonucleotide. Specifically, the siNAs include short

CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short

CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,

CC can contain deoxyribonucleotides, and can be chemically synthesised,

CC expressed from a vector or enzymatically synthesised. The invention also

CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates

CC and/or complexes of siNA; and vectors that express siNA. The siNAs are

CC used to modulate expression of the telomerase genes in cells, tissue

CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and

CC transplantants for the treatment of a variety of conditions. They may be

CC used for treating cancer, restenosis, infectious diseases (specifically

CC protozoal), transplant rejection, or autoimmune or age-related diseases,

CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,

CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug

CC screening, diagnosis, therapeutic target identification and validation,

CC genetic engineering, pharmacogenomics, studying gene function, and gene

CC mapping (e.g., of single nucleotide polymorphisms). The present sequence

CC represents a chemically modified siRNA targeted to the human TERC mRNA

CC transcript.

XX

SQ Sequence 21 BP; 4 A; 3 C; 7 G; 2 T; 5 U; 0 Other;

Query Match 4.2%; Score 19; DB 1; Length 21;

Best Local Similarity 73.7%; Pred No. 1.7e+02;

Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

Qy 300 GAAGAGTGGGCTGTGCA 318

Db 1 GAAGAGUUGGCGUCUGUCA 19

RESULT 250

ADP93833/c

ID ADP93833 standard; RNA; 21 BP.

XX ADP93833;

AC ADP93833;

XX 26-FEB-2004 (first entry)

DT Human TERC chemically modified siRNA, SEQ ID 560.

DE

XX Cytostatic; vasotropic; protozoicide; immunosuppressive; dermatological;

KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;

KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;

KW RNA interference; short interfering nucleic acid; siNA;

KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;

KW short hairpin RNA; shRNA; expression modulation; gene therapy;

KW drug screening; diagnosis; therapeutic target identification;

KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERC;

KW DNA-RNA hybrid; ss.

XX Synthetic.

OS Homo sapiens.

XX Key Location/Qualifiers

FT modified\_base 1..21

FT /\*tag= b

FT /mod\_base= OTHER

FT /note= "Pyrimidine bases are 2'-deoxy-2'-fluoro and

FT purines are Deoxy bases"

FT modified\_base 20..21

FT /\*tag= a

FT /mod\_base= OTHER

FT /note= "Ribothymidines. Also, the internucleotide linkage

FT is phosphorothioate"

XX WO2003070742-A1.

PN 28-AUG-2003.

XX 11-FEB-2003; 2003WO-US004088.

PR 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 17-JUL-2002; 2002US-0396600P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Mcswiggen J, Beigelman J;

PI WPI; 2003-689777/65.

DR New short interfering nucleic acid downregulates expression of the

XX telomerase gene useful e.g. for treatment and diagnosis of cancer.

PS Example 3; SEQ ID NO 560; 145pp; English.

XX The invention relates to short interfering nucleic acids (siNA) which

CC downregulate expression of the one or more telomerase genes by RNA

CC interference. The siNAs may or may not comprise ribonucleotides and may

CC be double or single stranded. They further comprise sense and antisense

CC regions, or alternatively are assembled from a sense oligonucleotide and

CC an antisense oligonucleotide. Specifically, the siNAs include short

CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short

CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,

CC can contain deoxyribonucleotides, and can be chemically synthesised,

CC expressed from a vector or enzymatically synthesised. The invention also

CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates

CC and/or complexes of siNA; and vectors that express siNA. The siNAs are

CC used to modulate expression of the telomerase genes in cells, tissue

CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and

CC transplantants for the treatment of a variety of conditions. They may be

CC used for treating cancer, restenosis, infectious diseases (specifically

CC protozoal), transplant rejection, or autoimmune or age-related diseases,

CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,

CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug

CC screening, diagnosis, therapeutic target identification and validation,

CC genetic engineering, pharmacogenomics, studying gene function, and gene

CC mapping (e.g., of single nucleotide polymorphisms). The present sequence

CC represents a chemically modified siRNA targeted to the human TERC mRNA

CC transcript.

XX

SQ	Sequence 21 BP; 5 A; 7 C; 3 G; 2 T; 4 U; 0 Other;	
	Query Match 4.2%; Score 19; DB 1; Length 21;	
	Best Local Similarity 100.0%; Pred. No. 1.7e+02;	
	Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
QY	300 GAAGAGTTGGGCTCTGTCA 318	
DB	19 GAAGAGTTGGGCTCTGTCA 1	
RESULT 251		
ADF93816/c		
ID	ADF93816 standard; RNA; 21 BP.	
XX		
AC	ADF93816;	
XX		
DT	26-FEB-2004 (first entry)	
XX		
DE	Human TERC chemically modified siRNA, SEQ ID 543.	
XX		
KW	Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;	
KW	neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;	
KW	antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;	
KW	RNA interference; short interfering nucleic acid; siRNA;	
KW	short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;	
KW	short hairpin RNA; shRNA; expression modulation; gene therapy;	
KW	drug screening; diagnosis; therapeutic target identification;	
KW	pharmacogenomics; gene function analysis; gene mapping; TERC; TERT;	
KW	DNA-RNA hybrid; ss.	
XX		
OS	Synthetic.	
OS	Homo sapiens.	
FH	Key Location/Qualifiers	
FT	modified_base 20..21	
FT	/*tag= a	
FT	/mod_base= OTHER	
FT	/note= "Ribothymidines"	
XX		
PN	WO2003070742-A1.	
XX		
XX	28-AUG-2003.	
XX		
XX	11-FEB-2003; 2003WO-US004088.	
XX		
XX	20-FEB-2002; 2002US-0358580P.	
PR	11-MAR-2002; 2002US-0363124P.	
PR	06-JUN-2002; 2002US-0386782P.	
PR	17-JUL-2002; 2002US-0396600P.	
PR	29-AUG-2002; 2002US-0406784P.	
PR	05-SEP-2002; 2002US-0408378P.	
PR	09-SEP-2002; 2002US-0409293P.	
PR	15-JAN-2003; 2003US-0440129P.	
XX		
PA	(RIBO-) RIBOZYME PHARM INC.	
XX		
PI	Mcswiggen J, Beigelman L;	
XX		
XX	WPI; 2003-689777/65.	
DR		
XX	New short interfering nucleic acid downregulates expression of the	
PT	telomerase gene useful e.g. for treatment and diagnosis of cancer.	
PT		
XX		
PS	Example 3; SEQ ID NO 543; 145pp; English.	
XX		
CC	The invention relates to short interfering nucleic acids (siNA) which	
CC	downregulate expression of the one or more telomerase genes by RNA	
CC	interference. The siNAs may or may not comprise ribonucleotides and may	
CC	be double or single stranded. They further comprise sense and antisense	
CC	regions, or alternatively are assembled from a sense oligonucleotide and	
CC	an antisense oligonucleotide. Specifically, the siNAs include short	
CC	interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short	
CC		
CC	hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,	
CC	can contain deoxyribonucleotides, and can be chemically synthesised,	
CC	expressed from a vector or enzymatically synthesised. The invention also	
CC	relates to kits for the in vitro or in vivo delivery of siNA; conjugates	
CC	and/or complexes of siNA; and vectors that express siNA. The siNAs are	
CC	used to modulate expression of the telomerase genes in cells, tissue	
CC	explants or organisms (e.g., by ex vivo gene therapy), or in grafts and	
CC	transplants for the treatment of a variety of conditions. They may be	
CC	used for treating cancer, restenosis, infectious diseases (specifically	
CC	protozoal), transplant rejection, or autoimmune or age-related diseases,	
CC	e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,	
CC	skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug	
CC	screening, diagnosis, therapeutic target identification and validation,	
CC	genetic engineering, pharmacogenomics, studying gene function, and gene	
CC	mapping (e.g., of single nucleotide polymorphisms). The present sequence	
CC	represents a chemically modified siRNA targeted to the human TERC mRNA	
CC	transcript.	
XX		
SQ	Sequence 21 BP; 5 A; 3 C; 7 G; 2 T; 4 U; 0 Other;	
	Query Match 4.2%; Score 19; DB 1; Length 21;	
	Best Local Similarity 100.0%; Pred. No. 1.7e+02;	
	Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
QY	148 CCACCGTTCACTCTAGAC 166	
DB	19 CCACCGTTCACTCTAGAC 1	
RESULT 252		
ADF93823/c		
ID	ADF93823 standard; RNA; 21 BP.	
XX		
AC	ADF93823;	
XX		
DT	26-FEB-2004 (first entry)	
XX		
DE	Human TERC chemically modified siRNA, SEQ ID 550.	
XX		
KW	Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;	
KW	neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;	
KW	antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;	
KW	RNA interference; short interfering nucleic acid; siNA;	
KW	short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;	
KW	short hairpin RNA; shRNA; expression modulation; gene therapy;	
KW	drug screening; diagnosis; therapeutic target identification;	
KW	pharmacogenomics; gene function analysis; gene mapping; TERC; TERT;	
KW	DNA-RNA hybrid; ss.	
XX		
OS	Synthetic.	
OS	Homo sapiens.	
FH	Key Location/Qualifiers	
FT	modified_base 1..21	
FT	/*tag= b	
FT	/mod_base= OTHER	
FT	/note= "Pyrimidine bases are 2'-deoxy-2'-fluoro"	
XX		
XX	WO2003070742-A1.	
XX		
XX	28-AUG-2003.	
XX		
XX	11-FEB-2003; 2003WO-US004088.	
XX		
XX	20-FEB-2002; 2002US-0358580P.	
PR	11-MAR-2002; 2002US-0363124P.	
PR	06-JUN-2002; 2002US-0386782P.	
PR	17-JUL-2002; 2002US-0396600P.	
PR	29-AUG-2002; 2002US-0406784P.	
PR	05-SEP-2002; 2002US-0408378P.	
PR	09-SEP-2002; 2002US-0409293P.	
PR	15-JAN-2003; 2003US-0440129P.	
XX		
PA	(RIBO-) RIBOZYME PHARM INC.	
XX		
PI	Mcswiggen J, Beigelman L;	
XX		
XX	WPI; 2003-689777/65.	
DR		
XX	New short interfering nucleic acid downregulates expression of the	
PT	telomerase gene useful e.g. for treatment and diagnosis of cancer.	
PT		
XX		
PS	Example 3; SEQ ID NO 543; 145pp; English.	
XX		
CC	The invention relates to short interfering nucleic acids (siNA) which	
CC	downregulate expression of the one or more telomerase genes by RNA	
CC	interference. The siNAs may or may not comprise ribonucleotides and may	
CC	be double or single stranded. They further comprise sense and antisense	
CC	regions, or alternatively are assembled from a sense oligonucleotide and	
CC	an antisense oligonucleotide. Specifically, the siNAs include short	
CC	interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short	
CC		

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PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX (RIBO-) RIBOZYME PHARM INC.
XX PA
XX Mcswiggen J, Beigelman L;
XX PI
XX WPI; 2003-689777/65.
XX DR
XX New short interfering nucleic acid downregulates expression of the
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.
XX PT
XX Example 3; SEQ ID NO 550; 145pp; English.
XX PS
XX The invention relates to short interfering nucleic acids (siNA) which
XX downregulate expression of the one or more telomerase genes by RNA
XX interference. The siNAs may or may not comprise ribonucleotides and may
XX be double or single stranded. They further comprise sense and antisense
XX regions, or alternatively are assembled from a sense oligonucleotide and
XX an antisense oligonucleotide. Specifically, the siNAs include short
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
XX can contain deoxyribonucleotides, and can be chemically synthesised,
XX expressed from a vector or enzymatically synthesised. The invention also
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates
XX and/or complexes of siNA; and vectors that express siNA. The siNAs are
XX used to modulate expression of the telomerase genes in cells, tissue
XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
XX transplants for the treatment of a variety of conditions. They may be
XX used for treating cancer, restenosis, infectious diseases (specifically
XX protoal), transplant rejection, or autoimmune or age-related diseases,
XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,
XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug
XX screening, diagnosis, therapeutic target identification and validation,
XX genetic engineering, pharmacogenomics, studying gene function, and gene
XX mapping (e.g., of single nucleotide polymorphisms). The present sequence
XX represents a chemically modified siRNA targeted to the human TERC mRNA
XX transcript.
XX SQ Sequence 21 BP; 7 A; 2 C; 6 G; 2 T; 4 U; 0 Other;
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 146 TTCACCGTTCATTTCTAGA 164
Db 19 TTCACCGTTCATTTCTAGA 1
RESULT 253
ADG30042/C
ID ADG30042 standard; RNA; 21 BP.
XX AC
XX ADG30042;
XX DT 26-FEB-2004 (first entry)
XX DE hTR-targeted siNA DNA-RNA hybrid - SEQ ID 608.
XX KW double-stranded short interfering nucleic acid; siNA;
XX antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;
XX anticonvulsant; pulmonary disease; restenosis; atherosclerosis;
XX Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;
XX amyotrophic lateral sclerosis; gene therapy; ss; DNA-RNA hybrid; hTR.
XX OS Unidentified.
XX OS Synthetic.
XX PN WO2003074654-A2.
XX
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX (RIBO-) RIBOZYME PHARM INC.
XX PA
XX Mcswiggen J, Beigelman L;
XX PI
XX WPI; 2003-689777/65.
XX DR
XX New short interfering nucleic acid downregulates expression of the
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.
XX PT
XX Example 3; SEQ ID NO 550; 145pp; English.
XX PS
XX The invention relates to short interfering nucleic acids (siNA) which
XX downregulate expression of the one or more telomerase genes by RNA
XX interference. The siNAs may or may not comprise ribonucleotides and may
XX be double or single stranded. They further comprise sense and antisense
XX regions, or alternatively are assembled from a sense oligonucleotide and
XX an antisense oligonucleotide. Specifically, the siNAs include short
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
XX can contain deoxyribonucleotides, and can be chemically synthesised,
XX expressed from a vector or enzymatically synthesised. The invention also
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates
XX and/or complexes of siNA; and vectors that express siNA. The siNAs are
XX used to modulate expression of the telomerase genes in cells, tissue
XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
XX transplants for the treatment of a variety of conditions. They may be
XX used for treating cancer, restenosis, infectious diseases (specifically
XX protoal), transplant rejection, or autoimmune or age-related diseases,
XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,
XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug
XX screening, diagnosis, therapeutic target identification and validation,
XX genetic engineering, pharmacogenomics, studying gene function, and gene
XX mapping (e.g., of single nucleotide polymorphisms). The present sequence
XX represents a chemically modified siRNA targeted to the human TERC mRNA
XX transcript.
XX SQ Sequence 21 BP; 7 A; 2 C; 6 G; 2 T; 4 U; 0 Other;
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 146 TTCACCGTTCATTTCTAGA 164
Db 19 TTCACCGTTCATTTCTAGA 1
RESULT 254
ADG30043/C
ID ADG30043 standard; RNA; 21 BP.
XX AC
XX ADG30043;
XX DT 26-FEB-2004 (first entry)
XX DE hTR-targeted siNA DNA-RNA hybrid - SEQ ID 609.
XX KW double-stranded short interfering nucleic acid; siNA;
XX antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;
XX anticonvulsant; pulmonary disease; restenosis; atherosclerosis;
XX Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;
XX amyotrophic lateral sclerosis; gene therapy; ss; DNA-RNA hybrid; hTR.
XX OS Unidentified.
XX OS Synthetic.
XX PN WO2003074654-A2.
XX
PD 12-SEP-2003.
XX 20-FEB-2003; 2003WO-US005028.
XX 20-FEB-2002; 2002US-0358580P.
XX 11-MAR-2002; 2002US-0363124P.
XX 06-JUN-2002; 2002US-0386782P.
XX 29-AUG-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 15-JAN-2003; 2003US-0440129P.
XX (SIRN-) SIRNA THERAPEUTICS INC.
XX Mcswiggen J, Beigelman L, Chowrira B, Favco P, Fosnaugh K;
XX Jamison S, Usman N, Thompson J;
XX WPI; 2003-731676/69.
XX New double-stranded short interfering nucleic acid molecule, useful for
XX down-regulating the expression of an endogenous mammalian target gene or
XX for treating diseases that respond to modulation of gene expression or
XX activity.
XX Example 24; SEQ ID NO 608; 593pp; English.
XX The invention relates to a double-stranded short interfering nucleic acid
XX (siNA) molecule that down-regulates expression of an endogenous mammalian
XX target gene comprising one or more chemical modifications and each strand
XX of the double-stranded siNA comprises about 21 nucleotides. The siNA of
XX the invention demonstrates antiarteriosclerotic, neuroprotective,
XX neurotropic, antiparkinsonian and anticonvulsant activities and may be
XX useful for down-regulating the expression of an endogenous mammalian
XX target gene and therefore in the treatment of any disease or condition
XX that responds to modulation of gene expression or activity in a cell,
XX tissue or organism. The disease or condition may include pulmonary
XX diseases such as restenosis, atherosclerosis, Alzheimer's disease,
XX Parkinson's disease, epilepsy, dementia, huntington's disease or
XX amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for
XX gene therapy applications. The current sequence is that of the siNA DNA-
XX RNA hybrid of the invention.
XX SQ Sequence 21 BP; 7 A; 2 C; 6 G; 2 T; 4 U; 0 Other;
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 146 TTCACCGTTCATTTCTAGA 164
Db 19 TTCACCGTTCATTTCTAGA 1
RESULT 254
ADG30043/C
ID ADG30043 standard; RNA; 21 BP.
XX AC
XX ADG30043;
XX DT 26-FEB-2004 (first entry)
XX DE hTR-targeted siNA DNA-RNA hybrid - SEQ ID 609.
XX KW double-stranded short interfering nucleic acid; siNA;
XX antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;
XX anticonvulsant; pulmonary disease; restenosis; atherosclerosis;
XX Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;
XX amyotrophic lateral sclerosis; gene therapy; ss; DNA-RNA hybrid; hTR.
XX OS Unidentified.
XX OS Synthetic.
XX PN WO2003074654-A2.

```

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XX PD 12-SEP-2003.
XX PF 20-FEB-2003; 2003WO-US005028.
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 15-JAN-2003; 2003US-0440129P.
XX PA (SIRN-) SIRNA THERAPEUTICS INC.
XX PI Mcswiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;
XX PI Jamison S, Usman N, Thompson J;
XX DR WPI; 2003-731676/69.
XX XX New double-stranded short interfering nucleic acid molecule, useful for
PT down-regulating the expression of an endogenous mammalian target gene or
PT for treating diseases that respond to modulation of gene expression or
PT activity.
XX XX Example 24; SEQ ID NO 609; 593pp; English.
XX CC The invention relates to a double-stranded short interfering nucleic acid
XX CC (siNA) molecule that down-regulates expression of an endogenous mammalian
XX CC target gene comprising one or more chemical modifications and each strand
XX CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of
XX CC the invention demonstrates antiarteriosclerotic, neuroprotective,
XX CC neurotropic, antiparkinsonian and anticonvulsant activities and may be
XX CC useful for down-regulating the expression of an endogenous mammalian
XX CC target gene and therefore in the treatment of any disease or condition
XX CC that responds to modulation of gene expression or activity in a cell,
XX CC tissue or organism. The disease or condition may include pulmonary
XX CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,
XX CC Parkinson's disease, epilepsy, dementia, huntington's disease or
XX CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for
XX CC gene therapy applications. The current sequence is that of the siNA DNA-
XX CC RNA hybrid of the invention.
XX SQ Sequence 21 BP; 5 A; 3 C; 7 G; 2 T; 4 U; 0 Other;
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 148 CCACCGTTCATTCTAGAGC 166
DB 19 CCACCGTTCATTCTAGAGC 1
RESULT 255
ADG30044/c
ID ADG30044 standard; RNA; 21 BP.
XX AC ADG30044;
XX XX 26-FEB-2004 (first entry)
XX DT hTR-targeted siNA DNA-RNA hybrid - SEQ ID 610.
XX DE double-stranded short interfering nucleic acid; siNA;
XX KW antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;
XX KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;
XX KW Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;
XX KW amyotrophic lateral sclerosis; gene therapy; ss; DNA-RNA hybrid; hTR.
XX OS Unidentified.
XX OS Synthetic.
XX XX
XX PD 12-SEP-2003.
XX PF 20-FEB-2003; 2003WO-US005028.
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 15-JAN-2003; 2003US-0440129P.
XX PA (SIRN-) SIRNA THERAPEUTICS INC.
XX PI Mcswiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;
XX PI Jamison S, Usman N, Thompson J;
XX DR WPI; 2003-731676/69.
XX XX New double-stranded short interfering nucleic acid molecule, useful for
PT down-regulating the expression of an endogenous mammalian target gene or
PT for treating diseases that respond to modulation of gene expression or
PT activity.
XX XX Example 24; SEQ ID NO 609; 593pp; English.
XX CC The invention relates to a double-stranded short interfering nucleic acid
XX CC (siNA) molecule that down-regulates expression of an endogenous mammalian
XX CC target gene comprising one or more chemical modifications and each strand
XX CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of
XX CC the invention demonstrates antiarteriosclerotic, neuroprotective,
XX CC neurotropic, antiparkinsonian and anticonvulsant activities and may be
XX CC useful for down-regulating the expression of an endogenous mammalian
XX CC target gene and therefore in the treatment of any disease or condition
XX CC that responds to modulation of gene expression or activity in a cell,
XX CC tissue or organism. The disease or condition may include pulmonary
XX CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,
XX CC Parkinson's disease, epilepsy, dementia, huntington's disease or
XX CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for
XX CC gene therapy applications. The current sequence is that of the siNA DNA-
XX CC RNA hybrid of the invention.
XX SQ Sequence 21 BP; 5 A; 3 C; 7 G; 2 T; 4 U; 0 Other;
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 148 CCACCGTTCATTCTAGAGC 166
DB 19 CCACCGTTCATTCTAGAGC 1
RESULT 256
ACC58028
ID ACC58028 standard; DNA; 21 BP.
XX AC ACC58028;
XX XX 11-AUG-2003 (first entry)
XX DT Short interfering RNA hTR#2 siRNA, targets telomerase RNA.
XX DE RNA interference; short interfering RNA; siRNA; telomerase; cancer;
XX KW tumour; cytostatic; contraceptive; immunosuppressive; antiinfertility;
XX KW fungicide; antiparasitic; antiinflammatory; human; gene therapy;
XX KW DNA-RNA hybrid; ss.
XX OS Synthetic.
XX OS Key Location/Qualifiers
XX FH

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Db      1 UUGUCUACCCUACUGAG 19
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RESULT 258
ADF93829
ID      ADF93829 standard; RNA; 23 BP.
XX
AC      ADF93829;
XX
DT      26-FEB-2004 (first entry)
XX
DE      Human TERC chemically modified siRNA, SEQ ID 556.
XX
KW      Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;
KW      neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;
KW      antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;
KW      RNA interference; short interfering nucleic acid; siRNA;
KW      short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KW      short hairpin RNA; shRNA; expression modulation; gene therapy;
KW      drug screening; diagnosis; therapeutic target identification;
KW      pharmacogenomics; gene function analysis; gene mapping; TERC; TEXT;
KW      DNA-RNA hybrid; ss.
XX
OS      Synthetic.
OS      Homo sapiens.
XX
FH      Key      Location/Qualifiers
FT      modified_base 1..23
FT      /*tag= b
FT      /mod_base= OTHER
FT      /note= "Pyrimidine bases are 2'-deoxy-2'-fluoro and
FT      purines are Deoxy bases"
FT      modified_base 1
FT      /*tag= a
FT      /mod_base= OTHER
FT      /note= "Inverted deoxy abasic nucleotide"
FT      modified_base 21..22
FT      /*tag= c
FT      /mod_base= OTHER
FT      modified_base 23
FT      /*tag= d
FT      /mod_base= OTHER
FT      /note= "Inverted deoxy abasic nucleotide"
XX
PN      WO2003070742-A1.
XX
XX      28-AUG-2003.
XX
XX      11-FEB-2003; 2003WO-US004088.
XX
XX      20-FEB-2002; 2002US-0358580P.
XX      11-MAR-2002; 2002US-0363124P.
XX      06-JUN-2002; 2002US-0386782P.
XX      17-JUL-2002; 2002US-0396600P.
XX      29-AUG-2002; 2002US-0406784P.
XX      05-SEP-2002; 2002US-0408378P.
XX      09-SEP-2002; 2002US-0409293P.
XX      15-JAN-2003; 2003US-0440129P.
XX
XX      (RIBO-) RIBOZYME PHARM INC.
XX
XX      Meswigen J, Beigelman L;
XX
XX      WPI; 2003-699777/65.
XX
XX      New short interfering nucleic acid downregulates expression of the
XX      telomerase gene useful e.g. for treatment and diagnosis of cancer.
XX
XX      Example 3; SEQ ID NO 556; 145pp; English.
XX
XX      The invention relates to short interfering nucleic acids (siNA) which

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CC      downregulate expression of the one or more telomerase genes by RNA
CC      interference. The siNAs may or may not comprise ribonucleotides and may
CC      be double or single stranded. They further comprise sense and antisense
CC      regions, or alternatively are assembled from a sense oligonucleotide and
CC      an antisense oligonucleotide. Specifically, the siNAs include short
CC      interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
CC      hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
CC      can contain deoxyribonucleotides, and can be chemically synthesised,
CC      expressed from a vector or enzymatically synthesised. The invention also
CC      relates to kits for the in vitro or in vivo delivery of siNA; conjugates
CC      and/or complexes of siNA; and vectors that express siNA. The siNAs are
CC      used to modulate expression of the telomerase genes in cells, tissue
CC      explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
CC      transplants for the treatment of a variety of conditions. They may be
CC      used for treating cancer, restenosis, infectious diseases (specifically
CC      protozoal), transplant rejection, or autoimmune or age-related diseases,
CC      e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,
CC      skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug
CC      screening, diagnosis, therapeutic target identification and validation,
CC      genetic engineering, pharmacogenomics, studying gene function, and gene
CC      mapping (e.g., of single nucleotide polymorphisms). The present sequence
CC      represents a chemically modified siRNA targeted to the human TERC mRNA
CC      transcript.
XX
SQ      Sequence 23 BP; 4 A; 3 C; 7 G; 2 T; 5 U; 2 Other;
      Query Match      4.2%; Score 19; DB 1; Length 23;
      Best Local Similarity 73.7%; Pred. No. 1.9e+02;
      Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;
QY      300 GAAGAGTTGGGCTCTGTCA 318
      |||||:||||:|:|
Db      2 GAAGAGUUGGGCUCUGUCA 20
RESULT 259
ADF93828
ID      ADF93828 standard; RNA; 23 BP.
XX
AC      ADF93828;
XX
DT      26-FEB-2004 (first entry)
XX
DE      Human TERC chemically modified siRNA, SEQ ID 555.
XX
KW      Cytostatic; vasotropic; protozoacide; immunosuppressive; dermatological;
KW      neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;
KW      antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;
KW      RNA interference; short interfering nucleic acid; siNA;
KW      short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KW      short hairpin RNA; shRNA; expression modulation; gene therapy;
KW      drug screening; diagnosis; therapeutic target identification;
KW      pharmacogenomics; gene function analysis; gene mapping; TERC; TEXT;
KW      DNA-RNA hybrid; ss.
XX
OS      Synthetic.
OS      Homo sapiens.
XX
FH      Key      Location/Qualifiers
FT      modified_base 1..23
FT      /*tag= b
FT      /mod_base= OTHER
FT      /note= "Pyrimidine bases are 2'-deoxy-2'-fluoro and
FT      purines are Deoxy bases"
FT      modified_base 1
FT      /*tag= a
FT      /mod_base= OTHER
FT      /note= "Inverted deoxy abasic nucleotide"
FT      modified_base 21..22
FT      /*tag= c
FT      /mod_base= OTHER
FT      modified_base 23
FT      /*tag= d
FT      /mod_base= OTHER
FT      /note= "Inverted deoxy abasic nucleotide"
XX
PN      WO2003070742-A1.
XX
XX      28-AUG-2003.
XX
XX      11-FEB-2003; 2003WO-US004088.
XX
XX      20-FEB-2002; 2002US-0358580P.
XX      11-MAR-2002; 2002US-0363124P.
XX      06-JUN-2002; 2002US-0386782P.
XX      17-JUL-2002; 2002US-0396600P.
XX      29-AUG-2002; 2002US-0406784P.
XX      05-SEP-2002; 2002US-0408378P.
XX      09-SEP-2002; 2002US-0409293P.
XX      15-JAN-2003; 2003US-0440129P.
XX
XX      (RIBO-) RIBOZYME PHARM INC.
XX
XX      Meswigen J, Beigelman L;
XX
XX      WPI; 2003-699777/65.
XX
XX      New short interfering nucleic acid downregulates expression of the
XX      telomerase gene useful e.g. for treatment and diagnosis of cancer.
XX
XX      Example 3; SEQ ID NO 556; 145pp; English.
XX
XX      The invention relates to short interfering nucleic acids (siNA) which

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PT FT /*tag= d
FT FT /mod_base= OTHER
XX FT /note= "Inverted deoxy abasic nucleotide"
XX PN W02003070742-A1.
XX PD 28-AUG-2003.
XX XX
XX PF 11-FEB-2003; 2003WO-US004088.
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 17-JUL-2002; 2002US-0396600P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 15-JAN-2003; 2003US-0440129P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Mcswiggen J, Beigelman L;
XX DR WPI; 2003-689777/65.
XX XX
XX PT New short interfering nucleic acid downregulates expression of the
XX FT telomerase gene useful e.g. for treatment and diagnosis of cancer.
XX PS Example 3; SEQ ID NO 555; 145pp; English.
XX CC The invention relates to short interfering nucleic acids (siNA) which
XX CC downregulate expression of the one or more telomerase genes by RNA
XX CC interference. The siNAs may or may not comprise ribonucleotides and may
XX CC be double or single stranded. They further comprise sense and antisense
XX CC regions, or alternatively are assembled from a sense oligonucleotide and
XX CC an antisense oligonucleotide. Specifically, the siNAs include short
XX CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
XX CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
XX CC can contain deoxyribonucleotides, and can be chemically synthesised,
XX CC expressed from a vector or enzymatically synthesised. The invention also
XX CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates
XX CC and/or complexes of siNA; and vectors that express siNA. The siNAs are
XX CC used to modulate expression of the telomerase genes in cells, tissue
XX CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
XX CC transplants for the treatment of a variety of conditions. They may be
XX CC used for treating cancer, restenosis, infectious diseases (specifically
XX CC protozoal), transplant rejection, or autoimmune or age-related diseases,
XX CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,
XX CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug
XX CC screening, diagnosis, therapeutic target identification and validation,
XX CC genetic engineering, pharmacogenomics, studying gene function, and gene
XX CC mapping (e.g., of single nucleotide polymorphisms). The present sequence
XX CC represents a chemically modified siRNA targeted to the human TERC mRNA
XX CC transcript.
XX SQ Sequence 23 BP; 4 A; 7 C; 3 G; 2 T; 5 U; 2 Other;
XX
XX Query Match 4.2%; Score 19; DB 1; Length 23;
XX Best Local Similarity 73.7%; Pred. No. 1.9e+02;
XX Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;
XX
QY 148 CCACCGTTCATTCVAGAGC 166
Db 2 CCACCGUUAUCUAGAGC 20
XX
RESULT 260
ADFP3827
ID ADF93827 standard; RNA; 23 BP.
XX
AC ADF93827;
XX
DT 26-FEB-2004 (first entry)
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XX DE Human TERC chemically modified siRNA, SEQ ID 554.
XX XX
XX KW Cytostatic; vasotropic; protozoacide; immunoasuppressive; dermatological;
XX KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;
XX KW antiarthritic; antinflammatory; gene therapy; telomerase; human; terc;
XX KW RNA interference; short interfering nucleic acid; siNA;
XX KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
XX KW short hairpin RNA; shRNA; expression modulation; gene therapy;
XX KW drug screening; diagnosis; therapeutic target identification;
XX KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERC;
XX KW DNA-RNA hybrid; ss.
XX XX
XX OS Synthetic.
XX OS Homo sapiens.
XX XX
XX PH Key Location/Qualifiers
XX FT modified_base 1..23
XX FT /tag= b
XX FT /mod_base= OTHER
XX FT /note= "Pyrimidine bases are 2'-deoxy-2'-fluoro and
XX FT purines are Deoxy bases"
XX FT modified_base 1
XX FT /tag= a
XX FT /mod_base= OTHER
XX FT /note= "Inverted deoxy abasic nucleotide"
XX FT modified_base 21..22
XX FT /tag= c
XX FT /mod_base= OTHER
XX FT /note= "Ribothymidines"
XX FT modified_base 23
XX FT /tag= d
XX FT /mod_base= OTHER
XX FT /note= "Inverted deoxy abasic nucleotide"
XX PN W02003070742-A1.
XX XX
XX PD 28-AUG-2003.
XX XX
XX PF 11-FEB-2003; 2003WO-US004088.
XX XX
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 17-JUL-2002; 2002US-0396600P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 15-JAN-2003; 2003US-0440129P.
XX XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX XX
XX PI Mcswiggen J, Beigelman L;
XX XX
XX DR WPI; 2003-689777/65.
XX XX
XX PT New short interfering nucleic acid downregulates expression of the
XX FT telomerase gene useful e.g. for treatment and diagnosis of cancer.
XX PS Example 3; SEQ ID NO 554; 145pp; English.
XX XX
XX CC The invention relates to short interfering nucleic acids (siNA) which
XX CC downregulate expression of the one or more telomerase genes by RNA
XX CC interference. The siNAs may or may not comprise ribonucleotides and may
XX CC be double or single stranded. They further comprise sense and antisense
XX CC regions, or alternatively are assembled from a sense oligonucleotide and
XX CC an antisense oligonucleotide. Specifically, the siNAs include short
XX CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
XX CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
XX CC can contain deoxyribonucleotides, and can be chemically synthesised,
XX CC expressed from a vector or enzymatically synthesised. The invention also
XX CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates
XX CC and/or complexes of siNA; and vectors that express siNA. The siNAs are
XX CC used to modulate expression of the telomerase genes in cells, tissue
XX CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
XX CC transplants for the treatment of a variety of conditions. They may be
XX CC used for treating cancer, restenosis, infectious diseases (specifically
XX CC protozoal), transplant rejection, or autoimmune or age-related diseases,
XX CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,
XX CC skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug
XX CC screening, diagnosis, therapeutic target identification and validation,
XX CC genetic engineering, pharmacogenomics, studying gene function, and gene
XX CC mapping (e.g., of single nucleotide polymorphisms). The present sequence
XX CC represents a chemically modified siRNA targeted to the human TERC mRNA
XX CC transcript.
XX SQ Sequence 23 BP; 4 A; 7 C; 3 G; 2 T; 5 U; 2 Other;
```





XX OS Synthetic.  
OS Homo sapiens.  
XX PH Key Location/Qualifiers  
FT modified\_base 1..23  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "Pyrimidine bases are 2'-deoxy-2'-fluoro"  
FT modified\_base 1  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Inverted deoxy abasic nucleotide"  
FT modified\_base 21..22  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "Ribothymidines"  
FT modified\_base 23  
FT /\*tag= d  
FT /mod\_base= OTHER  
FT /note= "Inverted deoxy abasic nucleotide"  
XX XX  
XX WO2003070742-A1.  
XX 28-AUG-2003.  
XX 11-FEB-2003; 2003WO-US004088.  
XX 20-FEB-2002; 2002US-0358580P.  
XX 11-MAR-2002; 2002US-0363124P.  
XX 06-JUN-2002; 2002US-0386782P.  
XX 17-JUL-2002; 2002US-0396600P.  
XX 29-AUG-2002; 2002US-0406784P.  
XX 05-SEP-2002; 2002US-0408378P.  
XX 09-SEP-2002; 2002US-0409293P.  
XX 15-JAN-2003; 2003US-0440129P.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX Mcswiggen J, Beigelman L;  
XX WPT; 2003-689777/65.  
XX New short interfering nucleic acid downregulates expression of the  
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX Example 3; SEQ ID NO 547; 145pp; English.  
XX The invention relates to short interfering nucleic acids (siNA) which  
XX downregulate expression of the one or more telomerase genes by RNA  
XX interference. The siNAs may or may not comprise ribonucleotides and may  
XX be double or single stranded. They further comprise sense and antisense  
XX regions, or alternatively are assembled from a sense oligonucleotide and  
XX an antisense oligonucleotide. Specifically, the siNAs include short  
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
XX can contain deoxyribonucleotides, and can be chemically synthesised,  
XX expressed from a vector or enzymatically synthesised. The invention also  
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
XX and/or complexes of siNA; and vectors that express siNA. The siNAs are  
XX used to modulate expression of the telomerase genes in cells, tissue  
XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
XX transplant kits for the treatment of a variety of conditions. They may be  
XX used for treating cancer, restenosis, infectious diseases (specifically  
XX protozoal), transplant rejection, or autoimmune or age-related diseases,  
XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
XX screening, diagnosis, therapeutic target identification and validation,  
XX genetic engineering, pharmacogenomics, studying gene function, and gene  
XX mapping (e.g., of single nucleotide polymorphisms). The present sequence  
XX represents a chemically modified siRNA targeted to the human TERC mRNA  
XX transcript.

SO Sequence 23 BP; 4 A; 7 C; 3 G; 2 T; 5 U; 2 Other;  
Query Match 4.2%; Score 19; DB 1; Length 23;  
Best Local Similarity 73.7%; Pred. NO. 1.9e+02;  
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;  
Oy 148 CCACCGTTCATTCTAGAGC 166  
Db 2 CCACCGUUAUCUAGAGC 20  
|||||:|:|:|:|:|:|  
RESULT 263  
ADF93821  
ID ADF93821 standard; RNA; 23 BP.  
XX AC ADF93821;  
XX DT 26-FEB-2004 (first entry)  
XX DE Human TERC chemically modified siRNA, SEQ ID 548.  
XX KW Cytostatic; vasotropic; protozoasidic; immunosuppressive; dermatological;  
KW neuroprotective; anti-HIV; ophthalmological; antiulcer; antirheumatic;  
KW antiarthritic; antiinflammatory; gene therapy; telomerase; human; terc;  
KW RNA interference; short interfering nucleic acid; siNA;  
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;  
KW short hairpin RNA; shRNA; expression modulation; gene therapy;  
KW drug screening; diagnosis; therapeutic target identification;  
KW pharmacogenomics; gene function analysis; gene mapping; TERC; TERC;  
KW DNA-RNA hybrid; ss.  
XX OS Synthetic.  
OS Homo sapiens.  
XX PH Key Location/Qualifiers  
FT modified\_base 1..23  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "Pyrimidine bases are 2'-deoxy-2'-fluoro"  
FT modified\_base 1  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "Inverted deoxy abasic nucleotide"  
FT modified\_base 21..22  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "Ribothymidines"  
FT modified\_base 23  
FT /\*tag= d  
FT /mod\_base= OTHER  
FT /note= "Inverted deoxy abasic nucleotide"  
XX XX  
XX WO2003070742-A1.  
XX 28-AUG-2003.  
XX 11-FEB-2003; 2003WO-US004088.  
XX 20-FEB-2002; 2002US-0358580P.  
XX 11-MAR-2002; 2002US-0363124P.  
XX 06-JUN-2002; 2002US-0386782P.  
XX 17-JUL-2002; 2002US-0396600P.  
XX 29-AUG-2002; 2002US-0406784P.  
XX 05-SEP-2002; 2002US-0408378P.  
XX 09-SEP-2002; 2002US-0409293P.  
XX 15-JAN-2003; 2003US-0440129P.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX Mcswiggen J, Beigelman L;  
XX WPT; 2003-689777/65.  
XX New short interfering nucleic acid downregulates expression of the  
XX telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX Example 3; SEQ ID NO 547; 145pp; English.  
XX The invention relates to short interfering nucleic acids (siNA) which  
XX downregulate expression of the one or more telomerase genes by RNA  
XX interference. The siNAs may or may not comprise ribonucleotides and may  
XX be double or single stranded. They further comprise sense and antisense  
XX regions, or alternatively are assembled from a sense oligonucleotide and  
XX an antisense oligonucleotide. Specifically, the siNAs include short  
XX interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
XX hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,  
XX can contain deoxyribonucleotides, and can be chemically synthesised,  
XX expressed from a vector or enzymatically synthesised. The invention also  
XX relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
XX and/or complexes of siNA; and vectors that express siNA. The siNAs are  
XX used to modulate expression of the telomerase genes in cells, tissue  
XX explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
XX transplant kits for the treatment of a variety of conditions. They may be  
XX used for treating cancer, restenosis, infectious diseases (specifically  
XX protozoal), transplant rejection, or autoimmune or age-related diseases,  
XX e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
XX skin ulcers and rheumatoid arthritis. The siNAs are also useful for drug  
XX screening, diagnosis, therapeutic target identification and validation,  
XX genetic engineering, pharmacogenomics, studying gene function, and gene  
XX mapping (e.g., of single nucleotide polymorphisms). The present sequence  
XX represents a chemically modified siRNA targeted to the human TERC mRNA  
XX transcript.

PT New short interfering nucleic acid downregulates expression of the  
PT telomerase gene useful e.g. for treatment and diagnosis of cancer.  
XX  
PS Example 3; SEQ ID NO 548; 145pp; English.  
XX  
CC The invention relates to short interfering nucleic acids (siNA) which  
CC downregulate expression of the one or more telomerase genes by RNA  
CC interference. The siNA may or may not comprise ribonucleotides and may  
CC be double or single stranded. They further comprise sense and antisense  
CC regions, or alternatively are assembled from a sense oligonucleotide and  
CC an antisense oligonucleotide. Specifically, the siNA include short  
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short  
CC hairpin RNA (shRNA). The siNA can be unmodified or chemically modified,  
CC can contain deoxyribonucleotides, and can be chemically synthesised,  
CC expressed from a vector or enzymatically synthesised. The invention also  
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates  
CC and/or complexes of siNA; and vectors that express siNA. The siNA are  
CC used to modulate expression of the telomerase genes in cells, tissue  
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and  
CC transplants for the treatment of a variety of conditions. They may be  
CC used for treating cancer, restenosis, infectious diseases (specifically  
CC protozoal), transplant rejection, or autoimmune or age-related diseases,  
CC e.g. multiple sclerosis, lupus erythematosus, AIDS, macular degeneration,  
CC skin ulcers and rheumatoid arthritis. The siNA are also useful for drug  
CC screening, diagnosis, therapeutic target identification and validation,  
CC genetic engineering, pharmacogenomics, studying gene function, and gene  
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence  
CC represents a chemically modified siRNA targeted to the human TRC mRNA  
XX transcript.  
XX  
SQ Sequence 23 BP; 4 A; 3 C; 7 G; 2 T; 5 U; 2 Other;  
Query Match 4.2%; Score 19; DB 1; Length 23;  
Best Local Similarity 73.7%; Pred. No. 1.9e+02;  
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;  
QY 300 GAAGAGTGGGCTCTGTCA 318  
|||||:|||||:|:|:  
Db 2 GAAGAGUUGGCGCUCUGUCA 20  
RESULT 264  
ADG30039  
ID ADG30039 standard; RNA; 23 BP.  
XX AC  
XX ADG30039;  
XX  
XX 26-FEB-2004 (first entry)  
XX  
XX hTR-targeted siNA DNA-RNA hybrid - SEQ ID 605.  
XX  
XX double-stranded short interfering nucleic acid; siNA;  
KW antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;  
KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;  
KW Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;  
KW amyotrophic lateral sclerosis; gene therapy; ss; DNA-RNA hybrid; hTR.  
XX  
XX Unidentified.  
OS  
XX Synthetic.  
OS  
XX WO2003074654-A2.  
XX  
XX 12-SEP-2003.  
XX  
XX 20-FEB-2003; 2003WO-US005028.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.

XX  
PA (SIRN-) SIRNA THERAPEUTICS INC.  
XX  
XX Mcswiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;  
PI Jamison S, Usman N, Thompson J;  
XX  
XX WPI; 2003-731676/69.  
XX  
XX New double-stranded short interfering nucleic acid molecule, useful for  
PT down-regulating the expression of an endogenous mammalian target gene or  
PT for treating diseases that respond to modulation of gene expression or  
PT activity.  
XX  
XX Example 24; SEQ ID NO 605; 593pp; English.  
PS  
XX The invention relates to a double-stranded short interfering nucleic acid  
CC (siNA) molecule that down-regulates expression of an endogenous mammalian  
CC target gene comprising one or more chemical modifications and each strand  
CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of  
CC the invention demonstrates antiarteriosclerotic, neuroprotective,  
CC neurotropic, antiparkinsonian and anticonvulsant activities and may be  
CC useful for down-regulating the expression of an endogenous mammalian  
CC target gene and therefore in the treatment of any disease or condition  
CC that responds to modulation of gene expression or activity in a cell,  
CC tissue or organism. The disease or condition may include pulmonary  
CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,  
CC Parkinson's disease, epilepsy, dementia, huntington's disease or  
CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for  
CC gene therapy applications. The current sequence is that of the siNA DNA-  
CC RNA hybrid of the invention.  
XX  
SQ Sequence 23 BP; 4 A; 7 C; 3 G; 2 T; 5 U; 2 Other;  
Query Match 4.2%; Score 19; DB 1; Length 23;  
Best Local Similarity 73.7%; Pred. No. 1.9e+02;  
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;  
QY 148 CCACCGTTCATTCTAGAGC 166  
|||||:|||||:|:|:  
Db 2 CCACCGUUCUUCUAGAGC 20  
RESULT 265  
ADG30040  
ID ADG30040 standard; RNA; 23 BP.  
XX AC  
XX ADG30040;  
XX  
XX 26-FEB-2004 (first entry)  
XX  
XX hTR-targeted siNA DNA-RNA hybrid - SEQ ID 606.  
XX  
XX double-stranded short interfering nucleic acid; siNA;  
KW antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;  
KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;  
KW Alzheimer's; Parkinson's; epilepsy; dementia; huntington's;  
KW amyotrophic lateral sclerosis; gene therapy; ss; DNA-RNA hybrid; hTR.  
XX  
XX Unidentified.  
OS  
XX Synthetic.  
OS  
XX WO2003074654-A2.  
XX  
XX 12-SEP-2003.  
XX  
XX 20-FEB-2003; 2003WO-US005028.  
XX  
XX 20-FEB-2002; 2002US-0358580P.  
PR 11-MAR-2002; 2002US-0363124P.  
PR 06-JUN-2002; 2002US-0386782P.  
PR 29-AUG-2002; 2002US-0406784P.  
PR 05-SEP-2002; 2002US-0408378P.  
PR 09-SEP-2002; 2002US-0409293P.  
PR 15-JAN-2003; 2003US-0440129P.

```

PR 15-JAN-2003; 2003US-0440129P.
XX PA (SIRN-) SIRNA THERAPEUTICS INC.
XX PI Mcswiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;
XX PI Jamison S, Usman N, Thompson J;
XX DR WPI; 2003-731676/69.
XX PT New double-stranded short interfering nucleic acid molecule, useful for
XX PT down-regulating the expression of an endogenous mammalian target gene or
XX PT for treating diseases that respond to modulation of gene expression or
XX PT activity.
XX PS Example 24; SEQ ID NO 606; 593pp; English.
XX CC The invention relates to a double-stranded short interfering nucleic acid
XX CC (siNA) molecule that down-regulates expression of an endogenous mammalian
XX CC target gene comprising one or more chemical modifications and each strand
XX CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of
XX CC the invention demonstrates antiarteriosclerotic, neuroprotective,
XX CC neurotropic, antiparkinsonian and anticonvulsant activities and may be
XX CC useful for down-regulating the expression of an endogenous mammalian
XX CC target gene and therefore in the treatment of any disease or condition
XX CC that responds to modulation of gene expression or activity in a cell,
XX CC tissue or organism. The disease or condition may include pulmonary
XX CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,
XX CC Parkinson's disease, epilepsy, dementia, Huntington's disease or
XX CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for
XX CC gene therapy applications. The current sequence is that of the siNA DNA-
XX CC RNA hybrid of the invention.
XX SQ Sequence 23 BP; 4 A; 3 C; 7 G; 2 T; 5 U; 2 Other;
Query Match 4.2%; Score 19; DB 1; Length 23;
Best Local Similarity 73.7%; Pred. No. 1.9e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;
Qy 300 GAAGAGTTGGGCTCTGTCA 318
Db |||||:::|:|:|:|
2 GAAGAGUUGGCGUCUGCA 20
RESULT 266
ADG30038
ID ADG30038 standard; RNA; 23 BP.
XX AC ADG30038;
XX DT 26-FEB-2004 (first entry)
XX DE hTR-targeted siNA DNA-RNA hybrid - SEQ ID 604.
XX KW double-stranded short interfering nucleic acid; siNA;
XX KW antiarteriosclerotic; neuroprotective; neurotropic; antiparkinsonian;
XX KW anticonvulsant; pulmonary disease; restenosis; atherosclerosis;
XX KW Alzheimer's; Parkinson's; epilepsy; dementia; Huntington's;
XX KW amyotrophic lateral sclerosis; gene therapy; ss; DNA-RNA hybrid; hTR.
XX OS Unidentified.
XX OS Synthetic.
XX PN WO2003074654-A2.
XX XX
XX PD 12-SEP-2003.
XX PF 20-FEB-2003; 2003WO-US005028.
XX XX
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
XX PR 15-JAN-2003; 2003US-0440129P.
XX PA (SIRN-) SIRNA THERAPEUTICS INC.
XX XX Mcswiggen J, Beigelman L, Chowrira B, Pavco P, Fosnaugh K;
XX PI Jamison S, Usman N, Thompson J;
XX DR WPI; 2003-731676/69.
XX PT New double-stranded short interfering nucleic acid molecule, useful for
XX PT down-regulating the expression of an endogenous mammalian target gene or
XX PT for treating diseases that respond to modulation of gene expression or
XX PT activity.
XX PS Example 24; SEQ ID NO 604; 593pp; English.
XX CC The invention relates to a double-stranded short interfering nucleic acid
XX CC (siNA) molecule that down-regulates expression of an endogenous mammalian
XX CC target gene comprising one or more chemical modifications and each strand
XX CC of the double-stranded siNA comprises about 21 nucleotides. The siNA of
XX CC the invention demonstrates antiarteriosclerotic, neuroprotective,
XX CC neurotropic, antiparkinsonian and anticonvulsant activities and may be
XX CC useful for down-regulating the expression of an endogenous mammalian
XX CC target gene and therefore in the treatment of any disease or condition
XX CC that responds to modulation of gene expression or activity in a cell,
XX CC tissue or organism. The disease or condition may include pulmonary
XX CC diseases such as restenosis, atherosclerosis, Alzheimer's disease,
XX CC Parkinson's disease, epilepsy, dementia, Huntington's disease or
XX CC amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for
XX CC gene therapy applications. The current sequence is that of the siNA DNA-
XX CC RNA hybrid of the invention.
XX SQ Sequence 23 BP; 4 A; 6 C; 2 G; 2 T; 7 U; 2 Other;
Query Match 4.2%; Score 19; DB 1; Length 23;
Best Local Similarity 63.2%; Pred. No. 1.9e+02;
Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0;
Qy 146 TTCACCGTTTCATTCTAGA 164
Db ::|||:::|:|:|:|
2 UCCACCGUUCUUCUGCA 20
RESULT 267
AAZ07305
ID AAZ07305 standard; DNA; 22 BP.
XX AC AAZ07305;
XX DT 22-OCT-1999 (first entry)
XX DE Human telomerase RNA gene (hTR) promoter specific primer hile.
XX KW Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;
XX KW gene therapy; thymidine kinase gene; anticancer therapy; human;
XX KW mutagenesis; PCR primer; ss.
XX XX
XX OS Synthetic.
XX OS Homo sapiens.
XX XX
XX PN WO9938964-A2.
XX XX
XX PD 05-AUG-1999.
XX PF 29-JAN-1999; 99WO-GB000308.
XX PR 29-JAN-1998; 98GB-00001902.
XX XX
XX PA (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.
XX PI Keith WN;
XX XX

```

DR WPI; 1999-479183/40.

XX Mouse and human telomerase RNA gene promoters, useful for tumor specific

PT gene therapy.

PS Disclosure; Fig 12; 109pp; English.

XX

XX The invention relates to promoter regions from mouse and human telomerase

CC RNA (TR) component genes. The TR gene promoter can be linked to a

CC heterologous gene, especially a gene encoding a cytotoxin, for therapy of

CC cancer, especially neoplasias. The telomerase is necessary for the

CC unrestricted proliferative capacity of many human cancers. Mutation or

CC dysregulation of the telomerase repression pathway may cause reactivation

CC or upregulation of telomerase expression in cancer. Substances,

CC identified in the methods, can be used to block transcription from the TR

CC gene promoter through interaction of the 5' regulatory sequences. These

CC substances, e.g. antisense oligonucleotides, transcription factors, are

CC peptide nucleic acids and factors that disrupt signal transduction, are

CC useful for cancer therapy. In particular, gene therapy vectors

CC (especially pGT62-codAupp) comprising the promoter and a viral thymidine

CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that

CC neoplasia can be controlled or treated. Direct down-regulation of

CC telomerase RNA gene through manipulation of transcription factors may be

CC effective anticancer therapy and the cloning of the hTR gene promoter

CC allows the analysis of therapeutic molecules which modulate hTR promoter

CC activity. Sequences AA207696-321 represent PCR primers used in cloning

CC and mutagenesis of human TR gene (hTR) promoter region

XX

SQ Sequence 22 BP; 3 A; 4 C; 12 G; 3 T; 0 U; 0 Other;

Query Match 4.2%; Score 18.8; DB 1; Length 22;

Best Local Similarity 90.9%; Pred. No. 1.9e+02;

Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 15 GGGCGTGGGAGGGGTGGGCC 36

DB 1 GGGCGTGGGAGGGGTAAATGGCC 22

|||||

RESULT 268

AAZ07291/C

ID AAZ07291 standard; DNA; 20 BP.

XX

AC AAZ07291;

XX

DT 22-OCT-1999 (first entry)

XX

DE Mouse telomerase RNA gene specific primer mTRr1.

XX

XX Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; terc;

KW gene therapy; thymidine kinase gene; anticancer therapy; mouse;

KW PCR primer; ss.

XX

OS Synthetic.

OS Mus sp.

XX

PN WO9938964-A2.

XX

PD 05-AUG-1999.

XX

PF 29-JAN-1999; 99WO-GB000308.

XX

PR 29-JAN-1998; 98GB-00001902.

XX

PA (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.

XX

PI Keith WN;

XX

DR WPI; 1999-479183/40.

XX

XX Mouse and human telomerase RNA gene promoters, useful for tumor specific

PT gene therapy.

XX

PS Disclosure; Fig 6; 109pp; English.

XX

XX The invention relates to promoter regions from mouse and human telomerase

CC RNA (TR) component genes. The TR gene promoter can be linked to a

CC heterologous gene, especially a gene encoding a cytotoxin, for therapy of

CC cancer, especially neoplasias. The telomerase is necessary for the

CC unrestricted proliferative capacity of many human cancers. Mutation or

CC dysregulation of the telomerase repression pathway may cause reactivation

CC or upregulation of telomerase expression in cancer. Substances,

CC identified in the methods, can be used to block transcription from the TR

CC gene promoter through interaction of the 5' regulatory sequences. These

CC substances, e.g. antisense oligonucleotides, transcription factors, are

CC peptide nucleic acids and factors that disrupt signal transduction, are

CC useful for cancer therapy. In particular, gene therapy vectors

CC (especially pGT62-codAupp) comprising the promoter and a viral thymidine

CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that

CC neoplasia can be controlled or treated. Direct down-regulation of

CC telomerase RNA gene through manipulation of transcription factors may be

CC effective anticancer therapy and the cloning of the hTR gene promoter

CC allows the analysis of therapeutic molecules which modulate hTR promoter

CC activity. Sequences AA207681-95 represent PCR primers for amplifying

CC mouse TR gene (terc) promoter sequence

XX

SQ Sequence 20 BP; 6 A; 5 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 4.1%; Score 18.4; DB 1; Length 20;

Best Local Similarity 95.0%; Pred. No. 1.8e+02;

Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 102 TTCTCGCTGACTTTCAGCGG 121

DB 20 TTCTCGCTGACTTTCAGCGG 1

|||||

RESULT 269

AAZ07294/C

ID AAZ07294 standard; DNA; 20 BP.

XX

AC AAZ07294;

XX

DT 22-OCT-1999 (first entry)

XX

DE Mouse telomerase RNA gene specific primer mTRr1.

XX

XX Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; terc;

KW gene therapy; thymidine kinase gene; anticancer therapy; mouse;

KW PCR primer; ss.

XX

OS Synthetic.

OS Mus sp.

XX

PN WO9938964-A2.

XX

PD 05-AUG-1999.

XX

PF 29-JAN-1999; 99WO-GB000308.

XX

PR 29-JAN-1998; 98GB-00001902.

XX

PA (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.

XX

PI Keith WN;

XX

DR WPI; 1999-479183/40.

XX

XX Mouse and human telomerase RNA gene promoters, useful for tumor specific

PT gene therapy.

XX

PS Disclosure; Fig 6; 109pp; English.

XX

XX The invention relates to promoter regions from mouse and human telomerase

CC RNA (TR) component genes. The TR gene promoter can be linked to a

CC heterologous gene, especially a gene encoding a cytotoxin, for therapy of

CC cancer, especially neoplasias. The telomerase is necessary for the  
 CC unrestricted proliferative capacity of many human cancers. Mutation or  
 CC dysregulation of the telomerase repression pathway may cause reactivation  
 CC or upregulation of telomerase expression in cancer. Substances,  
 CC identified in the methods, can be used to block transcription from the TR  
 CC gene promoter through interaction of the 5' regulatory sequences. These  
 CC substances, e.g. antisense oligonucleotides, transcription factors,  
 CC peptide nucleic acids and factors that disrupt signal transduction, are  
 CC useful for cancer therapy. In particular, gene therapy vectors  
 CC (especially pGT62-codAupp) comprising the promoter and a viral thymidine  
 CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that  
 CC neoplasia can be controlled or treated. Direct down-regulation of  
 CC telomerase RNA gene through manipulation of transcription factors may be  
 CC effective anticancer therapy and the cloning of the hTR gene promoter  
 CC allows the analysis of therapeutic molecules which modulate hTR promoter  
 CC activity. Sequences AA207681-95 represent PCR primers for amplifying  
 CC mouse TR gene (terc) promoter sequence

XX  
 SQ Sequence 20 BP; 6 A; 5 C; 7 G; 2 T; 0 U; 0 Other;  
 Query Match 4.1%; Score 18.4; DB 1; Length 20;  
 Best Local Similarity 95.0%; Pred. No. 1.8e+02;  
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 102 TTCTCGTGACTTTCACGGG 121  
 Db 20 TTCTCGTGACTTTCACGGG 1

RESULT 270  
 AAX18325  
 ID AAX18325 standard; DNA; 18 BP.  
 XX  
 AC AAX18325;  
 XX  
 DT 26-JUL-1999 (first entry)  
 XX  
 XX PCR primer for telomerase coding sequence.

XX Telomerase; human; cancer; diagnosis; melanoma; skin cancer; leukaemia;  
 KW neuroblastoma; breast carcinoma; colon carcinoma; lymphoma; osteosarcoma;  
 KW smooth muscle cell hyperplasia; stem cell proliferation; Wilm's tumour;  
 KW stem cell differentiation; organ regeneration; organ differentiation;  
 KW PCR primer; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN W09901560-A1.  
 XX  
 XX 14-JAN-1999.  
 XX  
 XX 01-JUL-1998; 98WO-US013835.  
 XX  
 PR 01-JUL-1997; 97US-0051410P.  
 PR 21-JUL-1997; 97US-0053018P.  
 PR 21-JUL-1997; 97US-0053329P.  
 PR 04-AUG-1997; 97US-0054642P.  
 PR 09-SEP-1997; 97US-0058287P.  
 XX  
 XX (CAMP-) CAMBIA BIOSYSTEMS LLC.  
 XX  
 XX Kilian A, Bowtell D;  
 XX  
 XX WPI; 1999-106060/09.  
 XX  
 XX New isolated vertebrate telomerase genes - used to develop products for  
 PT treating cancers or for organ regeneration, nerve cell or brain cell  
 PT growth following injury or bone marrow transplantation.  
 XX  
 XX Example 1; Page 43; 134pp; English.  
 PS  
 XX This sequence is a PCR primer for DNA encoding a truncated human

CC telomerase of the invention. Primers that amplify the telomerase coding  
 CC sequence can be used in a method for diagnosing cancer in a patient. The  
 CC telomerase can be used for detection, diagnosis and drug screening.  
 CC Inhibitors of telomerase activity can be used to treat cancers such as  
 CC melanomas, other skin cancers, neuroblastomas, breast carcinomas, colon  
 CC carcinomas, leukaemias, lymphomas, osteosarcomas or smooth muscle cell  
 CC hyperplasias or skin growths. Enhancers of telomerase may be used to  
 CC stimulate stem cell proliferation and differentiation (expansion of  
 CC haematopoietic stem cells could be administered in the bone marrow  
 CC transplant context). As well, many tissues have stem cells. Proliferation  
 CC of these cells may be useful in wound healing, hair growth, treatment of  
 CC disease such as Wilm's tumour, organ regeneration or differentiation  
 CC after injury or diseases, nerve cell or brain cell growth following  
 CC injury

XX  
 SQ Sequence 18 BP; 1 A; 2 C; 12 G; 3 T; 0 U; 0 Other;  
 Query Match 4.0%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GGGTTGCGGAGGGTGGGC 18  
 Db 1 GGGTTGCGGAGGGTGGGC 18

RESULT 271  
 AAA37552/c  
 ID AAA37552 standard; DNA; 18 BP.  
 XX  
 AC AAA37552;  
 XX  
 DT 15-AUG-2000 (first entry)  
 XX  
 XX PNA sequence #9 used to inhibit telomerase activity.

XX Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;  
 KW inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;  
 KW AIDS; HIV; fungal infection; forensic identification; detect; tumour;  
 KW paternity testing; ss.  
 XX  
 OS Synthetic.

XX  
 FH Key Location/Qualifiers  
 FT misc\_feature 1..18  
 FT /tag= a  
 FT /note= "Peptide nucleic acid molecule, where N-(2-  
 FT aminoethyl)glycine units are linked to nucleotide bases  
 FT via glycine amino N through a methylenecarbonyl linker."  
 XX  
 XX US6046307-A.  
 XX  
 XX 04-APR-2000.  
 XX  
 XX 09-APR-1997; 97US-00838545.  
 XX  
 XX 09-APR-1996; 96US-00630019.  
 XX  
 XX (TEXA ) UNIV TEXAS SYSTEM.  
 XX  
 XX Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;  
 XX  
 XX WPI; 2000-292432/25.  
 XX  
 XX New peptide nucleic acid (PNA) compounds that inhibit telomerase activity  
 PT in mammalian cells is useful as probes to detect the RNA component of a  
 PT mammalian telomerase.  
 XX  
 XX Claim 6; Col 71; 45pp; English.  
 PS  
 XX The present sequence represents a peptide nucleic acid molecule which  
 CC hybridises to the mRNA component of mammalian telomerase, and inhibits  
 CC telomerase activity. Telomerase is a ribonucleoprotein enzyme that

CC synthesizes one strand of the telomeric DNA, using as a template an 11  
 CC nucleotide sequence contained within the RNA component of the enzyme. The  
 CC invention relates to PNA molecules having a sequence of no more than 25  
 CC bases, which include the sequence GTTAGG. The uncharged nature of the PNA  
 CC backbone increases the melting temperature of associating strands,  
 CC increases the rate of association with targeted nucleic acids, and  
 CC affords greater resistance of degradation by proteases or nucleases. The  
 CC therapeutic PNAs may be used for treating disease conditions such as  
 CC cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human  
 CC immunodeficiency virus (HIV) infection/AIDS (acquired immunodeficiency  
 CC syndrome) and associated pathologies, fungal infections, and other  
 CC diseases characterized by abnormal telomere metabolism or telomerase  
 CC activity, in combination with antineoplastic and other cytotoxic or  
 CC used for molecular diagnostics, labelled PNAs are used as hybridization  
 CC probes to detect or quantitate polynucleotides having a human telomerase  
 CC RNA (hTR) sequence. PNA probes are also used for forensic identification  
 CC of individuals, e.g. paternity testing, based on hTR gene restriction  
 CC fragment length polymorphism (RFLP) pattern. PNAs are also useful as  
 CC probes to detect the RNA component of a mammalian telomerase and as  
 CC inhibitors of telomerase activity. The method of the present invention  
 CC allows cancerous conditions to be detected with increased confidence and  
 CC possibly at an earlier stage, before cells are detected as cancerous  
 CC based on pathological characteristics. The diagnostic and prognostic  
 CC methods of the present invention can be used to detect an immortal or  
 CC neoplastic cell or tumour tissue or cancer of any origin, provided the  
 CC cell expresses telomerase activity and its RNA component

XX Sequence 18 BP; 2 A; 5 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 4.0%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. NO. 1.7e+02;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 48 AACCTTAAGTGAAGGG 65  
 DB 18 AACCTTAAGTGAAGGG 1

RESULT 272

AAS15430/C

ID AAS15430 standard; DNA; 18 BP.

AC AAS15430;

DT 14-FEB-2002 (first entry)

XX PNA 27 inhibiting human and mammalian telomerase activity.

XX Mammalian; peptide nucleic acid; probe; forensic; paternity testing;  
 KW human telomerase RNA component; hTR gene RFLP pattern; cancer;  
 KW inflammation; lymphoproliferative disease; autoimmune disease;  
 KW neurodegenerative disease; neoplasia; hyperplasia; HIV; AIDS;  
 KW human immunodeficiency virus; acquired immunodeficiency syndrome;  
 KW telomere metabolism; mutant; cytostatic; anti-inflammatory;  
 KW immunosuppressive; polyamide backbone; ss.

OS Homo sapiens.

OS Synthetic.

PH Key Location/Qualifiers

FT modified\_base 1. .18

FT /\*tag= a

FT /note= "This sequence is a peptide nucleic acid, i.e. it  
 contains a polyamide backbone instead of a deoxyribose  
 backbone"

XX US6294650-B1.

XX 25-SEP-2001.

XX 08-JUL-1999; 99US-00349532.

XX

PR 09-APR-1996; 96US-00630019.  
 PR 09-APR-1997; 97US-00838545.  
 XX (TEXA ) UNIV TEXAS SYSTEM.

XX Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;  
 PI WPI; 2001-638024/73.

XX New peptide nucleic acids that hybridizes to the RNA component of  
 PT mammalian telomerase, useful for treating or preventing cancer,  
 PT inflammation, lymphoproliferative diseases, autoimmune disease, or  
 PT neurodegenerative diseases.

XX Claim 7; Col 73; 46pp; English.

XX The present invention relates to peptide nucleic acids (PNAs), comprising  
 CC a sequence of 6-25 nucleobases, that inhibit telomerase activity in  
 CC mammalian cells by hybridising to the RNA component of mammalian  
 CC telomerase. The PNAs are useful as probes to detect the RNA component of  
 CC mammalian telomerase and as inhibitors of telomerase activity, or to  
 CC detect and/or quantitate polynucleotide having the human telomerase RNA  
 CC component (hTR) sequence, as well as in forensic identification of  
 CC individuals, such as paternity testing or identification of criminal  
 CC suspects or unknown descendants based on the hTR gene RFLP pattern. The  
 CC PNA can be further used for treating or preventing cancer, inflammation,  
 CC lymphoproliferative diseases, autoimmune disease, or neurodegenerative  
 CC diseases. The PNAs in combination with other pharmaceuticals (such as  
 CC antineoplastic or cytostatic agents) can be used for treating neoplasia,  
 CC hyperplasia, human immunodeficiency virus (HIV) infections, acquired  
 CC immunodeficiency syndrome (AIDS) and associated pathologies, and other  
 CC diseases characterised by abnormal telomere metabolism or telomerase  
 CC activity. The present sequence represents one of the PNA sequences of the  
 CC invention

XX Sequence 18 BP; 2 A; 5 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 4.0%; Score 18; DB 1; Length 18;  
 Best Local Similarity 100.0%; Pred. NO. 1.7e+02;  
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 48 AACCTTAAGTGAAGGG 65

DB 18 AACCTTAAGTGAAGGG 1

RESULT 273

AAS07303

ID AAS07303 standard; DNA; 22 BP.

AC AAS07303;

XX 22-OCT-1999 (first entry)

XX Human telomerase RNA gene (hTR) promoter specific primer h112b.

XX Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;  
 KW gene therapy; thymidine kinase gene; anticancer therapy; human;  
 KW mutagenesis; PCR primer; ss.

OS Synthetic.

OS Homo sapiens.

XX WO9938964-A2.

XX 05-AUG-1999.

XX 29-JAN-1999; 99WO-GB000308.

XX 29-JAN-1998; 98GB-00001902.

XX (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.

XX



PT	obesity or cancer.	CC	reagents and kits, or in diagnostic, therapeutic and prophylactic
XX		CC	applications, e.g. to prevent or delay infection, inflammation or tumour
PS	Claim 3; SEQ ID NO 632; 940pp; English.	CC	formation. The present sequence represents an acyl-coenzyme A synthetase
XX		CC	1, ACS1, antisense oligonucleotide.
CC	The invention relates to an antisense compound targeted to a nucleic acid	XX	Sequence 20 BP; 1 A; 12 C; 4 G; 3 T; 0 U; 0 Other;
CC	molecule encoding acyl-coenzyme A synthetase 1 (ACS1). The antisense		Query Match 3.6%; Score 16.4; DB 1; Length 20;
CC	compound specifically hybridises with and inhibits the expression of		Best Local Similarity 94.4%; Pred. NO. 2.6e+02;
CC	ACS1. The antisense oligonucleotides or compounds are useful for	Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;	
CC	inhibiting the expression of acyl-coenzyme A synthetase 1 (ACS1), and for		
CC	treating diseases or conditions associated with aberrant expression of		
CC	ACS1, e.g. diabetes, obesity, metabolic syndrome X, cardiovascular		
CC	disorder or cancer. The antisense compounds are also useful as research		
CC	reagents and kits, or in diagnostic, therapeutic and prophylactic		
CC	applications, e.g. to prevent or delay infection, inflammation or tumour		
CC	formation. The present sequence represents an acyl-coenzyme A synthetase		
CC	1, ACS1, antisense oligonucleotide.		
XX	Sequence 20 BP; 1 A; 12 C; 4 G; 3 T; 0 U; 0 Other;		
SQ			
	Query Match 3.6%; Score 16.4; DB 1; Length 20;		
	Best Local Similarity 94.4%; Pred. NO. 2.6e+02;		
	Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;		
QY	332 CGGGGCGAGGCGAGGT 349		
DB	19 CGAGGCGAGGCGAGGT 2		
	RESULT 276		
ADK20489/c			
ID	ADK20489 standard; DNA; 20 BP.		
XX			
AC	ADK20489;		
XX			
DT	18-NOV-2004 (first entry)		
XX			
DE	Acyl-coenzyme A synthetase 1, ACS1, antisense oligonucleotide #566.		
XX			
KW	acyl-coenzyme A synthetase 1; ACS1; diabetes; obesity;		
KW	metabolic syndrome X; cardiovascular disorder; cancer; infection;		
KW	inflammation; tumour; antisense; ss.		
XX			
OS	Synthetic.		
XX			
PN	WO2004016749-A2.		
XX			
PD	26-FEB-2004.		
XX			
PF	14-AUG-2003; 2003WO-US025389.		
XX			
PR	14-AUG-2002; 2002US-0403591P.		
XX			
PA	(PHAA ) PHARMACIA CORP.		
XX			
PI	Ross SA;		
XX			
DR	WPI; 2004-203782/19.		
XX			
PT	New antisense compounds targeted to nucleic acid molecules encoding acyl-		
PT	coenzyme A synthetase 1 (ACS1), useful for treating diseases or		
PT	conditions associated with aberrant expression of ACS1, e.g. diabetes,		
PT	obesity or cancer.		
XX			
PS	Claim 3; SEQ ID NO 566; 940pp; English.		
XX			
CC	The invention relates to an antisense compound targeted to a nucleic acid		
CC	molecule encoding acyl-coenzyme A synthetase 1 (ACS1). The antisense		
CC	compound specifically hybridises with and inhibits the expression of		
CC	ACS1. The antisense oligonucleotides or compounds are useful for		
CC	inhibiting the expression of acyl-coenzyme A synthetase 1 (ACS1), and for		
CC	treating diseases or conditions associated with aberrant expression of		
CC	ACS1, e.g. diabetes, obesity, metabolic syndrome X, cardiovascular		
CC	disorder or cancer. The antisense compounds are also useful as research		
XX	Sequence 20 BP; 2 A; 12 C; 3 G; 3 T; 0 U; 0 Other;		
SQ			
	Query Match 3.6%; Score 16.4; DB 1; Length 20;		
	Best Local Similarity 94.4%; Pred. NO. 2.6e+02;		
	Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;		
QY	332 CGGGGCGAGGCGAGGT 349		





OS Synthetic.  
 XX Key  
 FH Location/Qualifiers  
 FT 1. .21  
 FT CDS /\*tag= a  
 XX  
 XX WO9311247-A1.  
 XX  
 XX 10-JUN-1993.  
 XX  
 XX 04-DEC-1992; 92WO-US010621.  
 XX  
 XX 06-DEC-1991; 91US-00803631.  
 XX 22-MAY-1992; 92US-00887265.  
 XX  
 XX (GETH ) GENENTECH INC.  
 XX Gorman CM, Groskreutz DJ, Marriott D;  
 XX  
 XX WPI; 1993-197065/24.  
 XX P-PSDB; AAR37621.  
 XX  
 XX Heterologous polypeptide factor prepn. - by introducing into polypeptide  
 XX factor dependent host cell nucleic acid, and then culturing host cell,  
 XX etc.  
 XX  
 XX Example; Page 54; 134pp; English.  
 XX  
 XX The inventors describe the production of mammalian cells expressing  
 XX prohormone convertase which facilitates the processing of prohormone  
 XX precursors to active hormones. More specifically the cleavage site is the  
 XX define murine prohormone convertase 1 specifically prorelaxin alanine  
 XX mutations of the basic residues K and R were constructed. The following  
 XX mutations were tested for substrate specificity to murine prohormone  
 XX convertase: 1.4, 2.4, 3.2, 4.3, 7.2 and 8.6 (see AAQ33256-63; AAR37619-  
 XX 26). (Updated on 25-MAR-2003 to correct PN field.)  
 XX  
 XX Sequence 21 BP; 10 A; 4 C; 4 G; 3 T; 0 U; 0 Other;  
 XX  
 XX Query Match 3.6%; Score 16.2; DB 1; Length 21;  
 XX Best Local Similarity 85.7%; Pred. No. 2.8e+02;  
 XX Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 XX  
 XX QY 156 CATTCTAGAGCAACAAAAA 176  
 XX |||||  
 XX 1 CATTCTAGAGCAACAGACAA 21  
 XX  
 XX Db  
 XX  
 XX RESULT 281  
 XX AAQ71457  
 XX ID AAQ71457 standard; DNA; 21 BP.  
 XX  
 XX AC AAQ71457;  
 XX  
 XX 25-MAR-2003 (revised)  
 XX 26-APR-1995 (first entry)  
 XX  
 XX Rx 2.4 prorelaxin C/A chain junction mutant cleavage site.  
 XX  
 XX prohormone; convertase; insulin; proinsulin; factor; growth; precursors;  
 XX transgenic; mammal; prorelaxin; cleavage; ss.  
 XX  
 XX Synthetic.  
 XX  
 XX WO9420624-A1.  
 XX  
 XX 15-SEP-1994.  
 XX  
 XX 01-MAR-1994; 94WO-US002233.  
 XX  
 XX 01-MAR-1993; 93US-00026143.  
 XX  
 XX

PA (GETH ) GENENTECH INC.  
 XX Gorman CM, Groskreutz DJ;  
 XX WPI; 1994-303031/37.  
 XX P-PSDB; AAR60585.  
 XX  
 XX Treating insulin-dependent disorders in mammals - by introducing a  
 XX nucleic acid encoding a variant proinsulin into a host cell with a  
 XX constitutive pathway of protein secretion, or a plasmid, and introducing  
 XX the cell or plasmid to the mammal.  
 XX  
 XX Example 3; Page 52; 117pp; English.  
 XX  
 XX A series of natural or mutated cDNAs for the prohormone convertase (PC)  
 XX cleavage sites in human prorelaxin protein between the C and A chains  
 XX (AAQ71455-59 corresponding to AAR60583-7) or in the B and C chains  
 XX (AAQ71460-63 corresponding to AAR60588-90). The natural cleavage sites  
 XX contain two dibasic residues, Lys-Arg, both of which are required for  
 XX cleavage. The mutant sites have replacements of either residues with an  
 XX Ala. This confers specificity to murine PC1. In this particular mutant,  
 XX the Lys residue at the fourth position of the cleavage site has been  
 XX replaced by a Ala residue. Relaxin is an ovarian hormonal peptide  
 XX responsible for remodelling the reproductive tract prior to parturition.  
 XX The cells containing both the prohormone convertase gene and the required  
 XX precursor to be expressed can be injected into a mammal. (Updated on 25-  
 XX MAR-2003 to correct PN field.)  
 XX  
 XX Sequence 21 BP; 10 A; 4 C; 4 G; 3 T; 0 U; 0 Other;  
 XX  
 XX Query Match 3.6%; Score 16.2; DB 1; Length 21;  
 XX Best Local Similarity 85.7%; Pred. No. 2.8e+02;  
 XX Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
 XX  
 XX QY 156 CATTCTAGAGCAACAAAAA 176  
 XX |||||  
 XX 1 CATTCTAGAGCAACAGACAA 21  
 XX  
 XX Db  
 XX  
 XX RESULT 282  
 XX AAQ18326/C  
 XX ID AAQ18326 standard; DNA; 21 BP.  
 XX  
 XX AC AAQ18326;  
 XX  
 XX 26-JUL-1999 (first entry)  
 XX  
 XX PCR primer for telomerase coding sequence.  
 XX  
 XX Telomerase; human; cancer; diagnosis; melanoma; skin cancer; leukaemia;  
 XX neuroblastoma; breast carcinoma; colon carcinoma; lymphoma; osteosarcoma;  
 XX smooth muscle cell hyperplasia; stem cell proliferation; Wilm's tumour;  
 XX stem cell differentiation; organ regeneration; organ differentiation;  
 XX PCR primer; ss.  
 XX  
 XX Synthetic.  
 XX Homo sapiens.  
 XX  
 XX WO9501560-A1.  
 XX  
 XX 14-JAN-1999.  
 XX  
 XX 01-JUL-1998; 98WO-US013835.  
 XX  
 XX 01-JUL-1997; 97US-0051410P.  
 XX 21-JUL-1997; 97US-0053018P.  
 XX 21-JUL-1997; 97US-0053329P.  
 XX 04-AUG-1997; 97US-0054642P.  
 XX 09-SEP-1997; 97US-0058287P.  
 XX  
 XX (CAMB-) CAMBIA BIOSYSTEMS LLC.  
 XX  
 XX Kilian A, Bowtell D;  
 XX

XX WPI; 1999-106060/09.

XX New isolated vertebrate telomerase genes - used to develop products for

XX treating cancers or for organ regeneration, nerve cell or brain cell

XX growth following injury or bone marrow transplantation.

XX Example 1; Page 43; 134pp; English.

XX This sequence is a PCR primer for DNA encoding a truncated human

XX telomerase of the invention. Primers that amplify the telomerase coding

XX sequence can be used in a method for diagnosing cancer in a patient. The

XX telomerase can be used for detection, diagnosis and drug screening.

XX Inhibitors of telomerase activity can be used to treat cancers such as

XX melanomas, other skin cancers, neuroblastomas, breast carcinomas, colon

XX carcinomas, leukemias, lymphomas, osteosarcomas or smooth muscle cell

XX hyperplasias or skin growths. Enhancers of telomerase may be used to

XX stimulate stem cell proliferation and differentiation (expansion of

XX haematopoietic stem cells could be administered in the bone marrow

XX transplant context). As well, many tissues have stem cells. Proliferation

XX of these cells may be useful in wound healing, hair growth, treatment of

XX disease such as Wilms' tumour, organ regeneration or differentiation

XX after injury or diseases, nerve cell or brain cell growth following

XX injury

XX Sequence 21 BP; 3 A; 5 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 3.6%; Score 16.2; DB 1; Length 21;

Best Local Similarity 85.7%; Pred. No. 2.8e+02;

Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 431 CAGGACTCGGCTCACATGC 451

Db 21 CAGGACTCGGCTCACATGC 1

RESULT 283

ID AAT89247

AC AAT89247 standard; DNA; 16 BP.

AC AAT89247;

XX 12-MAY-1998 (first entry)

XX DNA oligonucleotide 3, used in the measurement of Tm values.

XX Peptide nucleic acid; PNA; cancer; telomerase; probe; hybridisation;

XX inhibitor; human telomerase RNA; hTR; PCR; oligonucleotide; ss.

XX Synthetic.

XX WO9738013-A1.

XX 16-OCT-1997.

XX 09-APR-1997; 97WO-US005931.

XX 09-APR-1996; 96US-00630019.

XX (GERO-) GERON CORP.

XX Shay JW, Wright WE, Piatyszek MA, Corey D, Norton JC;

XX WPI; 1997-512647/47.

XX New peptide nucleic acids hybridising to mammalian telomerase RNA - used

XX to inhibit telomerase, for treating tumours and other proliferative

XX diseases, also for diagnosis.

XX Example 2; Page 49; 76pp; English.

XX This is an oligonucleotide used in the measurement of Tm values and their

XX complementary peptide nucleic acids (PNAs), (e.g. AAT89236-R89239). PNAs

CC hybridise specifically to an RNA component of mammalian telomerase, and

CC include the sequence GGG for specific hybridisation to the template

CC region of this component. PNAs can be used as probes to detect the RNA

CC component of mammalian telomerase and as inhibitors of telomerase

CC activity, especially in the treatment of cancer

XX Sequence 16 BP; 5 A; 2 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 3.5%; Score 16; DB 1; Length 16;

Best Local Similarity 100.0%; Pred. No. 2.1e+02;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 53 TAACTGAGAGGGCGT 68

Db 1 TAACTGAGAGGGCGT 16

RESULT 284

AAA37569

ID AAA37569 standard; DNA; 16 BP.

XX AAA37569;

XX 15-AUG-2000 (first entry)

XX PNA sequence #27 used to inhibit telomerase activity.

XX Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;

XX inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;

XX AIDS; HIV; fungal infection; forensic identification; detect; tumour;

XX paternity testing; ss.

XX Synthetic.

XX Key Location/Qualifiers

FT misc\_feature 1..16

FT /tag= a

FT /note= "Peptide nucleic acid molecule, where N-(2-

FT aminoethyl)glycine units are linked to nucleotide bases

FT via glycine amino N through a methylenecarbonyl linker"

XX US6046307-A.

XX 04-APR-2000.

XX 09-APR-1997; 97US-00838545.

XX 09-APR-1996; 96US-00630019.

XX (TEXA ) UNIV TEXAS SYSTEM.

XX Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;

XX WPI; 2000-292432/25.

XX New peptide nucleic acid (PNA) compounds that inhibit telomerase activity

XX in mammalian cells is useful as probes to detect the RNA component of a

XX mammalian telomerase.

XX Example 2; Col 33; 45pp; English.

XX The present sequence represents a peptide nucleic acid molecule which

XX hybridises to the mRNA component of mammalian telomerase, and inhibits

XX telomerase activity. Telomerase is a ribonucleoprotein enzyme that

XX synthesizes one strand of the telomeric DNA, using as a template an 11

XX nucleotide sequence contained within the RNA component of the enzyme. The

XX invention relates to PNA molecules having a sequence of no more than 25

XX bases, which include the sequence GTTAGG. The uncharged nature of the PNA

XX backbone increases the melting temperature of associating strands,

XX increases the rate of association with targeted nucleic acids, and

XX affords greater resistance of degradation by proteases or nucleases. The

XX therapeutic PNAs may be used for treating disease conditions such as

XX cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human

CC immunodeficiency virus (HIV) infection/AIDS (acquired immunodeficiency  
 CC syndrome) and associated pathologies, fungal infections, and other  
 CC diseases characterized by abnormal telomere metabolism or telomerase  
 CC activity, in combination with antineoplastic and other cytotoxic or  
 CC cytostatic agents, antifungal agents, and other nucleotides. PNAs may be  
 CC used for molecular diagnostics, labelled PNAs are used as hybridization  
 CC probes to detect or quantitate polynucleotides having a human telomerase  
 CC RNA (hTR) sequence. PNA probes are also used for forensic identification  
 CC of individuals, e.g. paternity testing, based on hTR gene restriction  
 CC fragment length polymorphism (RFLP) pattern. PNAs are also useful as  
 CC probes to detect the RNA component of a mammalian telomerase and as  
 CC inhibitors of telomerase activity. The method of the present invention  
 CC allows cancerous conditions to be detected with increased confidence and  
 CC possibly at an earlier stage, before cells are detected as cancerous  
 CC based on pathological characteristics. The diagnostic and prognostic  
 CC methods of the present invention can be used to detect an immortal or  
 CC neoplastic cell or tumour tissue or cancer of any origin, provided the  
 CC cell expresses telomerase activity and its RNA component  
 XX

SQ Sequence 16 BP; 5 A; 2 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 3.5%; Score 16; DB 1; Length 16;  
 Best Local Similarity 100.0%; Pred. No. 2.1e+02;  
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 53 TAACTGAGAAGGCGT 68  
 |||||  
 Db 1 TAACTGAGAAGGCGT 16

## RESULT 285

AAAS15447  
 ID AAS15447 standard; DNA; 16 BP.

XX  
 AC AAS15447;

XX 14-FEB-2002 (first entry)

XX Oligonucleotide #3 used in melting temperature studies of PNAs.

XX Mammalian; paternity testing; human telomerase RNA component;  
 KW hTR gene RFLP pattern; cancer; inflammation; forensic;  
 KW lymphoproliferative disease; autoimmune disease; hyperplasia;  
 KW neurodegenerative disease; neoplasia; HIV; AIDS; cytostatic;  
 KW human immunodeficiency virus; acquired immunodeficiency syndrome;  
 KW telomere metabolism; anti-inflammatory; immunosuppressive; ss.

XX Homo sapiens.  
 OS Synthetic.

XX US6294650-B1.

XX 25-SEP-2001.

XX 08-JUL-1999; 99US-00349532.

XX 09-APR-1996; 96US-00630019.

XX 09-APR-1997; 97US-00838545.

XX (TEXA ) UNIV TEXAS SYSTEM.

XX Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;

XX WPI; 2001-638024/73.

XX New peptide nucleic acids that hybridizes to the RNA component of  
 PT mammalian telomerase, useful for treating or preventing cancer,  
 PT inflammation, lymphoproliferative diseases, autoimmune disease, or  
 PT neurodegenerative diseases.

XX Example 2; Col 34; 46pp; English.

XX The present invention relates to peptide nucleic acids (PNAs), comprising

CC a sequence of 6-25 nucleobases, that inhibit telomerase activity in  
 CC mammalian cells by hybridising to the RNA component of mammalian  
 CC telomerase. The PNAs are useful as probes to detect the RNA component of  
 CC mammalian telomerase and as inhibitors of telomerase activity, or to  
 CC detect and/or quantitate polynucleotide having the human telomerase RNA  
 CC component (hTR) sequence, as well as in forensic identification of  
 CC individuals, such as paternity testing or identification of criminal  
 CC suspects or unknown descendants based on the hTR gene RFLP pattern. The  
 CC PNA can be further used for treating or preventing cancer, inflammation,  
 CC lymphoproliferative diseases, autoimmune disease, or neurodegenerative  
 CC diseases. The PNAs in combination with other pharmaceuticals (such as  
 CC antineoplastic or cytostatic agents) can be used for treating neoplasia,  
 CC hyperplasia, human immunodeficiency virus (HIV) infections, acquired  
 CC immunodeficiency syndrome (AIDS) and associated pathologies, and other  
 CC diseases characterised by abnormal telomere metabolism or telomerase  
 CC activity. The present sequence representing a DNA oligonucleotide is  
 CC complementary to some of the PNAs of the present invention, and is used  
 CC in melting temperature studies  
 XX

SQ Sequence 16 BP; 5 A; 2 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 3.5%; Score 16; DB 1; Length 16;  
 Best Local Similarity 100.0%; Pred. No. 2.1e+02;  
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 53 TAACTGAGAAGGCGT 68  
 |||||  
 Db 1 TAACTGAGAAGGCGT 16

## RESULT 286

AAZ07277

ID AAZ07277 standard; DNA; 20 BP.

XX  
 AC AAZ07277;

XX 22-OCT-1999 (first entry)

XX Human telomerase RNA gene (hTR) specific primer hTRg.

XX Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;  
 KW gene therapy; thymidine kinase gene; anticancer therapy; human;  
 KW PCR primer; ss.

XX Synthetic.

OS Homo sapiens.

XX WO938964-A2.

XX 05-AUG-1999.

XX 29-JAN-1999; 99WO-GB000308.

XX 29-JAN-1998; 98GB-00001902.

XX (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.

XX Keith WN;

XX WPI; 1999-479183/40.

XX Mouse and human telomerase RNA gene promoters, useful for tumor specific  
 PT gene therapy.

XX Disclosure; Fig 6; 109pp; English.

XX The invention relates to promoter regions from mouse and human telomerase  
 CC RNA (TR) component genes. The TR gene promoter can be linked to a  
 CC heterologous gene, especially a gene encoding a cytotoxin, for therapy of  
 CC cancer, especially neoplasias. The telomerase is necessary for the  
 CC unrestricted proliferative capacity of many human cancers. Mutation or  
 CC dysregulation of the telomerase repression pathway may cause reactivation  
 CC or upregulation of telomerase expression in cancer. Substances,

CC identified in the methods, can be used to block transcription from the TR  
 CC gene promoter through interaction of the 5' regulatory sequences. These  
 CC substances, e.g. antisense oligonucleotides, transcription factors,  
 CC peptide nucleic acids and factors that disrupt signal transduction, are  
 CC useful for cancer therapy. In particular, gene therapy vectors  
 CC (especially pGT62-codAupp) comprising the promoter and a viral thymidine  
 CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that  
 CC neoplasia can be controlled or treated. Direct down-regulation of  
 CC telomerase RNA gene through manipulation of transcription factors may be  
 CC effective anticancer therapy and the cloning of the hTR gene promoter  
 CC allows the analysis of therapeutic molecules which modulate hTR promoter  
 CC activity. Sequences AA207623-80 represents PCR primers for amplifying  
 CC human TR gene (hTR) promoter sequence  
 XX  
 SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 3.5%; Score 16; DB 1; Length 20;  
 Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 436 CTCGGCTCACATGC 451  
 |||||  
 Db 1 CTCGGCTCACATGC 16

RESULT 287  
 ADH56499/c  
 ID ADH56499 standard; DNA; 20 BP.  
 XX  
 AC ADH56499;  
 XX  
 DT 25-MAR-2004 (first entry)  
 XX  
 DE Human tumour endothelial marker antisense oligonucleotide ISIS 208420.  
 XX  
 KW human; ss; antisense; hypothetical tumour endothelial marker; tumour;  
 KW hyperproliferative disorder; colon cancer; infection; inflammation.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN US2003232770-A1.  
 XX

PD 18-DEC-2003.

PF 17-JUN-2002; 2002US-00174020.

PR 17-JUN-2002; 2002US-00174020.

PA (ISIS-) ISIS PHARM INC.

PI Monia BP, Dobie KW;

DR WPI; 2004-061309/06.

XX New antisense compound targeted to a nucleic acid molecule encoding  
 PT hypothetical tumor endothelial marker, useful for modulating expression  
 PT of hypothetical tumor endothelial marker or for treating colon cancer.

PS Example 15; SEQ ID NO 71; 102pp; English.

XX The invention relates to a compound targeted to a nucleic acid molecule  
 CC encoding hypothetical tumor endothelial marker. The compound,  
 CC particularly the antisense oligonucleotide is useful in modulating the  
 CC function of nucleic acid molecules encoding hypothetical tumour  
 CC endothelial marker. The antisense compound can also be used as research  
 CC tools and diagnostics. It can also be used as tools in differential  
 CC and/or combinatorial analyses to elucidate expression patterns of a  
 CC portion or the entire complement of genes expressed within cells and  
 CC tissues. The compound can also be used for treating diseases or  
 CC conditions associated with hypothetical tumour endothelial marker,  
 CC preferably hyperproliferative disorder, e.g. colon cancer. The compound  
 CC can also be used as prophylaxis, e.g. to prevent or delay infection,

CC inflammation or tumour formation. The present sequence represents a human  
 CC hypothetical tumour endothelial marker target region.

SQ Sequence 20 BP; 1 A; 7 C; 4 G; 8 T; 0 U; 0 Other;  
 Query Match 3.5%; Score 15.8; DB 1; Length 20;  
 Best Local Similarity 89.5%; Pred. No. 2.9e+02;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 362 GGCCGCGAGGAGGAACG 380  
 |||||  
 Db 20 GGCCACAGGAAAGGAACG 2

RESULT 288

ADH56566

ID ADH56566 standard; DNA; 20 BP.

AC ADH56566;

DT 25-MAR-2004 (first entry)

DE Human hypothetical tumour endothelial marker target region ISIS 126034.

KW human; ss; hypothetical tumour endothelial marker; tumour;

KW hyperproliferative disorder; colon cancer; infection; inflammation.

OS Homo sapiens.

PN US2003232770-A1.

PD 18-DEC-2003.

PF 17-JUN-2002; 2002US-00174020.

PR 17-JUN-2002; 2002US-00174020.

PA (ISIS-) ISIS PHARM INC.

PI Monia BP, Dobie KW;

DR WPI; 2004-061309/06.

XX New antisense compound targeted to a nucleic acid molecule encoding  
 PT hypothetical tumor endothelial marker, useful for modulating expression  
 PT of hypothetical tumor endothelial marker or for treating colon cancer.

PS Example 15; SEQ ID NO 138; 102pp; English.

XX The invention relates to a compound targeted to a nucleic acid molecule  
 CC encoding hypothetical tumour endothelial marker. The compound,  
 CC particularly the antisense oligonucleotide is useful in modulating the  
 CC function of nucleic acid molecules encoding hypothetical tumour  
 CC endothelial marker. The antisense compound can also be used as research  
 CC tools and diagnostics. It can also be used as tools in differential  
 CC and/or combinatorial analyses to elucidate expression patterns of a  
 CC portion or the entire complement of genes expressed within cells and  
 CC tissues. The compound can also be used for treating diseases or  
 CC conditions associated with hypothetical tumour endothelial marker,  
 CC preferably hyperproliferative disorder, e.g. colon cancer. The compound  
 CC can also be used as prophylaxis, e.g. to prevent or delay infection,  
 CC inflammation or tumour formation. The present sequence represents a human  
 CC hypothetical tumour endothelial marker target region.

SQ Sequence 20 BP; 8 A; 4 C; 7 G; 1 T; 0 U; 0 Other;  
 Query Match 3.5%; Score 15.8; DB 1; Length 20;  
 Best Local Similarity 89.5%; Pred. No. 2.9e+02;  
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 362 GGCCGCGAGGAGGAACG 380  
 |||||  
 Db 1 GGCCACAGGAAAGGAACG 19



KW benign prostate hypertrophy; cancer; sarcoma; neoplasm; leukaemia;  
KW lymphoma; biallelic marker; PCR primer; ss.  
XX  
OS Homo sapiens.  
XX  
PN WO20000607-A1.  
XX  
PD 06-JAN-2000.  
XX  
XX 30-JUN-1999; 99WO-IB001242.  
XX  
PF 30-JUN-1998; 98US-0091315P.  
PR  
PR 10-DEC-1998; 98US-0111909P.  
XX  
XX (GEST ) GENSET.  
FA  
PI Bougueleret L;  
XX  
XX WPI; 2000-1117170/10.  
DR  
XX Novel nucleic acid and polymorphic markers used for diagnosis of  
PT diseases, especially those involving abnormal cell proliferation and  
PT differentiation.  
XX  
XX Claim 16; Page 206; 223pp; English.  
XX  
XX This sequence represents a PCR for the retinoblastoma binding protein-7  
CC (RBP-7) genomic sequence (AAZ86967) of the invention. The RBP-7 coding  
CC sequence and regulatory sequences are useful for the recombinant  
CC production of the protein and for expressing heterologous nucleic acids.  
CC Primers and probes derived from the RBP-7 nucleotide sequence (such as  
CC this sequence) are useful for DNA amplification and detection methods.  
CC RBP-7 biallelic markers (see AAZ86993-Z87034) are useful for diagnosis of  
CC disease related to alteration in the regulation or in the coding regions  
CC of the RBP-7 gene and for prognosis/diagnosis of an eventual treatment  
CC with therapeutic agents, especially agents acting on pathologies  
CC involving abnormal cell proliferation and/or differentiation, these  
CC include thyroid hyperplasia, psoriasis, benign prostate hypertrophy,  
CC cancers, including breast cancer, sarcomas and other neoplasms, bladder  
CC cancer, colon cancer, lung cancer, prostate cancer, various leukaemias,  
CC and lymphomas. RBP-7 antibodies are useful as diagnostic agents  
XX  
XX Sequence 20 BP; 9 A; 3 C; 4 G; 4 T; 0 U; 0 Other;  
SQ  
Query Match 3.4%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. No. 3.1e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
Qy 166 CAACAAAAAATGTCAG 182  
Db 1 CAACAAATAAATGTCAG 17  
  
RESULT 292  
ADK20650/c  
ID ADK20650 standard; DNA; 20 BP.  
XX  
AC ADK20650;  
XX  
XX 18-NOV-2004 (first entry)  
XX  
XX Acyl-coenzyme A synthetase 1, ACS1, antisense oligonucleotide #727.  
DE  
XX acyl-coenzyme A synthetase 1; ACS1; diabetes; obesity;  
KW metabolic syndrome X; cardiovascular disorder; cancer; infection;  
KW inflammation; tumour; antisense; ss.  
XX  
OS Synthetic.  
XX  
XX WO2004016749-A2.  
PN  
XX 26-FEB-2004.  
PD  
XX

PF 14-AUG-2003; 2003WO-US025389.  
XX  
PR 14-AUG-2002; 2002US-0403591P.  
XX  
PA (PHAA ) PHARMACIA CORP.  
XX  
XX Ross SA;  
FI  
XX WPI; 2004-203782/19.  
DR  
XX New antisense compounds targeted to nucleic acid molecules encoding acyl-  
PT coenzyme A synthetase 1 (ACS1), useful for treating diseases or  
PT conditions associated with aberrant expression of ACS1, e.g. diabetes,  
PT obesity or cancer.  
XX  
XX Claim 3; SEQ ID NO 727; 940pp; English.  
PS  
XX The invention relates to an antisense compound targeted to a nucleic acid  
CC molecule encoding acyl-coenzyme A synthetase 1 (ACS1). The antisense  
CC compound specifically hybridises with and inhibits the expression of  
CC ACS1. The antisense oligonucleotides or compounds are useful for  
CC inhibiting the expression of acyl-coenzyme A synthetase 1 (ACS1), and for  
CC treating diseases or conditions associated with aberrant expression of  
CC ACS1, e.g. diabetes, obesity, metabolic syndrome X, cardiovascular  
CC disorder or cancer. The antisense compounds are also useful as research  
CC reagents and kits, or in diagnostic, therapeutic and prophylactic  
CC applications, e.g. to prevent or delay infection, inflammation or tumour  
CC formation. The present sequence represents an acyl-coenzyme A synthetase  
CC 1, ACS1, antisense oligonucleotide.  
XX  
XX Sequence 20 BP; 2 A; 13 C; 2 G; 3 T; 0 U; 0 Other;  
SQ  
Query Match 3.4%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. No. 3.1e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
Qy 333 GGGGGCGAGGCGAGGT 349  
Db 20 GAGGGCGAGGCGAGGT 4  
  
RESULT 293  
ADK20828/c  
ID ADK20828 standard; DNA; 20 BP.  
XX  
AC ADK20828;  
XX  
XX 18-NOV-2004 (first entry)  
DT  
XX Acyl-coenzyme A synthetase 1, ACS1, antisense oligonucleotide #905.  
DE  
XX acyl-coenzyme A synthetase 1; ACS1; diabetes; obesity;  
KW metabolic syndrome X; cardiovascular disorder; cancer; infection;  
KW inflammation; tumour; antisense; ss.  
XX  
OS Synthetic.  
XX  
XX WO2004016749-A2.  
PN  
XX 26-FEB-2004.  
PD  
XX 14-AUG-2003; 2003WO-US025389.  
PF  
XX 14-AUG-2002; 2002US-0403591P.  
PR  
XX (PHAA ) PHARMACIA CORP.  
XX  
XX Ross SA;  
FI  
XX WPI; 2004-203782/19.  
DR  
XX New antisense compounds targeted to nucleic acid molecules encoding acyl-  
PT coenzyme A synthetase 1 (ACS1), useful for treating diseases or  
PT

PT conditions associated with aberrant expression of ACS1, e.g. diabetes,  
XX obesity or cancer.  
PS Claim 3; SEQ ID NO 905; 940pp; English.  
XX  
CC The invention relates to an antisense compound targeted to a nucleic acid  
CC molecule encoding acyl-coenzyme A synthetase 1 (ACS1). The antisense  
CC compound specifically hybridises with and inhibits the expression of  
CC ACS1. The antisense oligonucleotides or compounds are useful for  
CC inhibiting the expression of acyl-coenzyme A synthetase 1 (ACS1), and for  
CC treating diseases or conditions associated with aberrant expression of  
CC ACS1, e.g. diabetes, obesity, metabolic syndrome X, cardiovascular  
CC disorder or cancer. The antisense compounds are also useful as research  
CC reagents and kits, or in diagnostic, therapeutic and prophylactic  
CC applications, e.g. to prevent or delay infection, inflammation or tumour  
CC formation. The present sequence represents an acyl-coenzyme A synthetase  
CC 1, ACS1, antisense oligonucleotide.  
XX  
SQ Sequence 20 BP; 1 A; 12 C; 4 G; 3 T; 0 U; 0 Other;  
  
Query Match 3.4%; Score 15.4; DB 1; Length 20;  
Best Local Similarity 94.1%; Pred. No. 3.1e+02;  
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
QY 332 CGGGGCGAGGCGAGG 348  
Db 17 CGAGGCGAGGCGGAGG 1  
  
RESULT 294  
AAC67060  
ID AAC67060 standard; DNA; 20 BP.  
AC  
AC AAC67060;  
XX  
DT 03-APR-2001 (first entry)  
XX  
DE Rat/human glutamate transporter GLAST PCR primer #2.  
XX  
XX Human; huntingtin; Huntington's disease; immunogen; fusion protein;  
KW PCR primer; ss.  
XX  
OS Homo sapiens.  
OS Rattus sp.  
XX  
XX WO200078813-A2.  
PN  
XX  
PD 28-DEC-2000.  
XX  
PF 19-JUN-2000; 2000WO-US016908.  
XX  
PR 18-JUN-1999; 99US-0140018P.  
XX  
PR (UYEM-) UNIV EMORY.  
PA  
XX Li X, Li S;  
PI  
XX WPI; 2001-102700/11.  
DR  
XX Novel rat pheochromocytoma PC12 cell line useful as cellular model of  
PT Huntington's disease, comprising an expression cassette containing a DNA  
PT encoding a truncated mutant huntingtin.  
XX  
XX Example 1; Page 21; 55pp; English.  
PS  
XX The present invention provides a rat or mouse pheochromocytoma cell line  
CC stably transfected with an expression cassette encoding a truncated  
CC mutant huntingtin. This can be used in the study of the pathological  
CC mechanism in Huntington's disease and enables the development of  
CC therapies and diagnostic techniques for the disease  
XX  
SQ Sequence 20 BP; 1 A; 7 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 3.4%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 3.2e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 313 CTGTCAGCGCGGGTCTCTC 332  
Db 1 CTGTCGCCACGGGTTTCTC 20  
  
RESULT 295  
ADK21153/C  
ID ADK21153 standard; DNA; 20 BP.  
XX  
XX ADK21153;  
AC  
XX 18-NOV-2004 (first entry)  
DT  
XX  
DE Acyl-coenzyme A synthetase 1, ACS1, antisense oligonucleotide #1230.  
XX  
KW acyl-coenzyme A synthetase 1; ACS1; diabetes; obesity;  
KW metabolic syndrome X; cardiovascular disorder; cancer; infection;  
KW inflammation; tumour; antisense; ss.  
XX  
XX Synthetic.  
OS  
XX WO2004016749-A2.  
PN  
XX 26-FEB-2004.  
PD  
XX 14-AUG-2003; 2003WO-US025389.  
PF  
XX 14-AUG-2002; 2002US-0403591P.  
PR  
XX (PHAA ) PHARMACIA CORP.  
PA  
XX Ross SA;  
PI  
XX WPI; 2004-203782/19.  
DR  
XX New antisense compounds targeted to nucleic acid molecules encoding acyl-  
PT coenzyme A synthetase 1 (ACS1), useful for treating diseases or  
PT conditions associated with aberrant expression of ACS1, e.g. diabetes,  
PT obesity or cancer.  
XX  
XX Claim 3; SEQ ID NO 1230; 940pp; English.  
PS  
XX The invention relates to an antisense compound targeted to a nucleic acid  
CC molecule encoding acyl-coenzyme A synthetase 1 (ACS1). The antisense  
CC compound specifically hybridises with and inhibits the expression of  
CC ACS1. The antisense oligonucleotides or compounds are useful for  
CC inhibiting the expression of acyl-coenzyme A synthetase 1 (ACS1), and for  
CC treating diseases or conditions associated with aberrant expression of  
CC ACS1, e.g. diabetes, obesity, metabolic syndrome X, cardiovascular  
CC disorder or cancer. The antisense compounds are also useful as research  
CC reagents and kits, or in diagnostic, therapeutic and prophylactic  
CC applications, e.g. to prevent or delay infection, inflammation or tumour  
CC formation. The present sequence represents an acyl-coenzyme A synthetase  
CC 1, ACS1, antisense oligonucleotide.  
XX  
SQ Sequence 20 BP; 1 A; 11 C; 5 G; 3 T; 0 U; 0 Other;  
  
Query Match 3.4%; Score 15.2; DB 1; Length 20;  
Best Local Similarity 85.0%; Pred. No. 3.2e+02;  
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;  
  
QY 328 CTCTCGGCGGCGAGGCGGAG 347  
Db 20 CTGCCGAGGCGGAGGCGGAG 1  
  
RESULT 296  
AAT89229/c  
ID AAT89229 standard; DNA; 15 BP.



```

XX AC AAT89229;
XX DT 21-OCT-2004 (revised)
XX DT 12-MAY-1998 (first entry)
XX DE Peptide nucleic acid 5, targeted to mammalian telomerase.
XX XX
XX KW Peptide nucleic acid; PNA; cancer; telomerase; probe; hybridisation;
XX KW inhibitor; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT modified_base 1..15
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "Sugar-phosphate backbone has been replaced by a
XX FT peptide backbone"
XX PN WO9738013-A1.
XX XX
XX PD 16-OCT-1997.
XX XX
XX PF 09-APR-1997; 97WO-US005931.
XX XX
XX PR 09-APR-1996; 96US-00630019.
XX XX
XX PA (GERO-) GERON CORP.
XX XX
XX FI Shay JW, Wright WE, Piatyszek MA, Corey D, Norton JC;
XX DR WPI; 1997-512647/47.
XX XX
XX PT New peptide nucleic acids hybridising to mammalian telomerase RNA - used
XX PT to inhibit telomerase, for treating tumours and other proliferative
XX FT diseases, also for diagnosis.
XX XX
XX PS Claim 9; Page 59; 76pp; English.
XX CC This sequence is a novel peptide nucleic acid (PNA), which acts as an
XX CC inhibitor of mammalian, preferably human, telomerase. The PNAs hybridise
XX CC specifically to an RNA component of mammalian telomerase, and include the
XX CC sequence GGG for specific hybridisation to the template region of this
XX CC component. PNAs can be used as probes to detect the RNA component of
XX CC mammalian telomerase and as inhibitors of telomerase activity, especially
XX CC in the treatment of cancer
XX CC
XX CC Revised record issued on 21-OCT-2004 : Correction to feature table key
XX CC
XX SQ Sequence 15 BP; 5 A; 1 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 3.3%; Score 15; DB 1; Length 15;
XX Best Local Similarity 100.0%; Pred. No. 2.3e+02;
XX Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 42 TTGCTCAACCTTAAC 56
XX Db 15 TTGCTCAACCTTAAC 1
XX
XX RESULT 297
XX AAT89248
XX ID AAT89248 standard; DNA; 15 BP.
XX XX
XX AC AAT89248;
XX XX
XX DT 12-MAY-1998 (first entry)
XX DE DNA oligonucleotide 4, used in the measurement of Tm values.
XX XX
XX KW Peptide nucleic acid; PNA; cancer; telomerase; probe; hybridisation;
XX KW inhibitor; human telomerase RNA; hTR; PCR; oligonucleotide; ss.

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XX OS Synthetic.
XX XX
XX PN WO9738013-A1.
XX XX
XX PD 16-OCT-1997.
XX XX
XX PF 09-APR-1997; 97WO-US005931.
XX XX
XX PR 09-APR-1996; 96US-00630019.
XX XX
XX PA (GERO-) GERON CORP.
XX XX
XX FI Shay JW, Wright WE, Piatyszek MA, Corey D, Norton JC;
XX DR WPI; 1997-512647/47.
XX XX
XX PT New peptide nucleic acids hybridising to mammalian telomerase RNA - used
XX PT to inhibit telomerase, for treating tumours and other proliferative
XX FT diseases, also for diagnosis.
XX XX
XX PS Example 2; Page 49; 76pp; English.
XX CC This is an oligonucleotide used in the measurement of Tm values and their
XX CC complementary peptide nucleic acids (PNAs), (e.g. AAT89234). PNAs
XX CC hybridise specifically to an RNA component of mammalian telomerase, and
XX CC include the sequence GGG for specific hybridisation to the template
XX CC region of this component. PNAs can be used as probes to detect the RNA
XX CC component of mammalian telomerase and as inhibitors of telomerase
XX CC activity, especially in the treatment of cancer
XX CC
XX SQ Sequence 15 BP; 6 A; 4 C; 3 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 3.3%; Score 15; DB 1; Length 15;
XX Best Local Similarity 100.0%; Pred. No. 2.3e+02;
XX Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 49 ACCCTAACTGAGAG 63
XX Db 1 ACCCTAACTGAGAG 15
XX
XX RESULT 298
XX AAT89226/c
XX ID AAT89226 standard; DNA; 15 BP.
XX XX
XX AC AAT89226;
XX XX
XX DT 21-OCT-2004 (revised)
XX DT 12-MAY-1998 (first entry)
XX XX
XX DE Peptide nucleic acid 2, targeted to mammalian telomerase.
XX XX
XX KW Peptide nucleic acid; PNA; cancer; telomerase; probe; hybridisation;
XX KW inhibitor; ss.
XX XX
XX OS Synthetic.
XX XX
XX FH Key Location/Qualifiers
XX FT modified_base 1..15
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "Sugar-phosphate backbone has been replaced by a
XX FT peptide backbone"
XX PN WO9738013-A1.
XX XX
XX PD 16-OCT-1997.
XX XX
XX PF 09-APR-1997; 97WO-US005931.
XX XX
XX PR 09-APR-1996; 96US-00630019.
XX XX
XX KW Peptide nucleic acid; PNA; cancer; telomerase; probe; hybridisation;
XX KW inhibitor; human telomerase RNA; hTR; PCR; oligonucleotide; ss.

```

PA (GERO-) GERON CORP.  
 XX Shay JW, Wright WE, Piatyszek MA, Corey D, Norton JC;  
 XX WPI; 1997-512647/47.  
 XX New peptide nucleic acids hybridising to mammalian telomerase RNA - used  
 PT to inhibit telomerase, for treating tumours and other proliferative  
 PT diseases, also for diagnosis.  
 XX Claim 9; Page 59; 76pp; English.  
 XX This sequence is a novel peptide nucleic acid (PNA), which acts as an  
 CC inhibitor of mammalian, preferably human, telomerase. The PNAs hybridise  
 CC specifically to an RNA component of mammalian telomerase, and include the  
 CC sequence GGG for specific hybridisation to the template region of this  
 CC component. PNAs can be used as probes to detect the RNA component of  
 CC mammalian telomerase and as inhibitors of telomerase activity, especially  
 CC in the treatment of cancer  
 CC Revised record issued on 21-OCT-2004 : Correction to feature table key  
 XX  
 XX Sequence 15 BP; 3 A; 2 C; 5 G; 5 T; 0 U; 0 Other;  
 SQ Query Match 3.3%; Score 15; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 46 CTAACCCCTAACTGAG 60  
 Db 15 CTAACCCCTAACTGAG 1  
 RESULT 299  
 AAV41177/C  
 ID AAV41177 standard; DNA; 15 BP.  
 XX  
 XX AAV41177;  
 XX  
 XX 08-OCT-1998 (first entry)  
 XX RNA component of human telomerase (hTR) antisense oligo 2lab3.  
 XX RNA component; human telomerase; antisense oligonucleotide; infection;  
 XX neuroblastoma; bladder cancer; colon cancer; prostate cancer; cancer;  
 XX contraception; sterilisation; immunosuppression; therapeutic; hTR;  
 XX immune system down-regulation; anti-inflammatory therapy; ss.  
 XX Synthetic.  
 OS Homo sapiens.  
 OS WO9828442-A1.  
 XX 02-JUL-1998.  
 XX 19-DEC-1997; 97WO-US023619.  
 XX 20-DEC-1996; 96US-00770564.  
 XX 20-DEC-1996; 96US-00770565.  
 XX (GERO-) GERON CORP.  
 XX Kim NW, Wu F, Kealey JT, Pruzan R, Weinrich SL;  
 XX WPI; 1998-377670/32.  
 XX New polynucleotide(s) anti:sense to human telomerase - used for detecting  
 XX or inhibiting human telomerase, e.g. for treating cancers, contraception,  
 PT immuno-suppression or treating infection.  
 XX Claim 11; Page 65; 80pp; English.  
 XX Sequences shown in AAV41169 to AAV41181 represent antisense

CC oligonucleotides to the RNA component of human telomerase (hTR). These  
 CC antisense oligonucleotides specifically hybridise to a nucleotide  
 CC sequence within an accessible region of the hTR, but that does not  
 CC hybridise to a sequence within the template region of hTR. These  
 CC oligonucleotides may specifically be used for detection of an RNA  
 CC component of human telomerase in a sample. This is useful for diagnosing  
 CC cancer (especially neuroblastoma, bladder, colon and prostate cancer),  
 CC and providing prognosis for a cancer patient. The inhibitory  
 CC oligonucleotides can inhibit the telomerase activity level in a cell by  
 CC interfering with transcription of the RNA component, decreasing the half-  
 CC life of the telomerase RNA component transcript, inhibiting assembly of  
 CC the RNA component into the telomerase holoenzyme, or inhibiting the  
 CC polymerase activity of telomerase. These antisense oligonucleotides can  
 CC be used for inhibiting telomerase activity in both cultured cells and in  
 CC cells in vivo. They can be used in therapeutics for treating or  
 CC preventing cancer, for contraception or sterilisation, for  
 CC immunosuppression, and for selectively down-regulating specific branches  
 CC of the immune system, e.g. a specific subset of T-cells, in anti-  
 CC inflammatory therapies or for treating infections by, e.g. yeast,  
 CC parasites or fungi  
 XX  
 XX Sequence 15 BP; 5 A; 3 C; 4 G; 3 T; 0 U; 0 Other;  
 SQ Query Match 3.3%; Score 15; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 152 CGTTCATCTCTAGAC 166  
 Db 15 CGTTCATCTCTAGAC 1  
 RESULT 300  
 AAA37570  
 ID AAA37570 standard; DNA; 15 BP.  
 XX  
 XX AAA37570;  
 XX  
 XX 15-AUG-2000 (first entry)  
 XX PNA sequence #28 used to inhibit telomerase activity.  
 XX Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;  
 KW inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;  
 KW AIDS; HIV; fungal infection; forensic identification; detect; tumour;  
 KW paternity testing; ss.  
 XX  
 OS Synthetic.  
 XX  
 XX Key Location/Qualifiers  
 FH misc\_feature 1..15  
 FT /tag= a  
 FT /notes "Peptide nucleic acid molecule, where N-(2-  
 FT aminoethyl)glycine units are linked to nucleotide bases  
 FT via glycine amino N through a methylenecarbonyl linker"  
 XX  
 XX US6046307-A.  
 PN  
 XX  
 XX 04-APR-2000.  
 PD  
 XX  
 XX 09-APR-1997; 97US-00838545.  
 PF  
 XX  
 XX 09-APR-1996; 96US-00630019.  
 PR  
 XX  
 XX (TEXA ) UNIV TEXAS SYSTEM.  
 PA  
 XX Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;  
 XX WPI; 2000-292432/25.  
 XX New peptide nucleic acid (PNA) compounds that inhibit telomerase activity  
 PT in mammalian cells is useful as probes to detect the RNA component of a  
 PT mammalian telomerase.

```

XX PS Example 2; Col 33; 45pp; English.
XX CC
XX CC The present sequence represents a peptide nucleic acid molecule which
XX CC hybridises to the mRNA component of mammalian telomerase, and inhibits
XX CC telomerase activity. Telomerase is a ribonucleoprotein enzyme that
XX CC synthesizes one strand of the telomeric DNA, using as a template an 11
XX CC nucleotide sequence contained within the RNA component of the enzyme. The
XX CC invention relates to PNA molecules having a sequence of no more than 25
XX CC bases, which include the sequence GTTAGG. The uncharged nature of the PNA
XX CC backbone increases the melting temperature of associating strands,
XX CC increases the rate of association with targeted nucleic acids, and
XX CC affords greater resistance of degradation by proteases or nucleases. The
XX CC therapeutic PNAs may be used for treating disease conditions such as
XX CC cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human
XX CC immunodeficiency virus (HIV) infection/AIDS (acquired immunodeficiency
XX CC syndrome) and associated pathologies, fungal infections, and other
XX CC diseases characterized by abnormal telomere metabolism or telomerase
XX CC activity, in combination with antineoplastic and other cytotoxic or
XX CC cytostatic agents, antifungal agents, and other nucleotides. PNAs may be
XX CC used for molecular diagnostics, labelled PNAs are used as hybridization
XX CC probes to detect or quantitate polynucleotides having a human telomerase
XX CC RNA (hTR) sequence. PNA probes are also used for forensic identification
XX CC of individuals, e.g. paternity testing, based on hTR gene restriction
XX CC fragment length polymorphism (RFLP) pattern. PNAs are also useful as
XX CC probes to detect the RNA component of a mammalian telomerase and as
XX CC inhibitors of telomerase activity. The method of the present invention
XX CC allows cancerous conditions to be detected with increased confidence and
XX CC possibly at an earlier stage, before cells are detected as cancerous
XX CC based on pathological characteristics. The diagnostic and prognostic
XX CC methods of the present invention can be used to detect an immortal or
XX CC neoplastic cell or tumour tissue or cancer of any origin, provided the
XX CC cell expresses telomerase activity and its RNA component
XX CC
XX SQ Sequence 15 BP; 6 A; 4 C; 3 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 3.3%; Score 15; DB 1; Length 15;
XX Best Local Similarity 100.0%; Pred. No. 2.3e+02;
XX Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 49 ACCCTAACTGAGAG 63
Db 1 ACCCTAACTGAGAG 15
XX
RESULT 301
AAA37587/C
ID AAA37587 standard; DNA; 15 BP.
XX
XX AC AAA37587;
XX
XX 15-AUG-2000 (first entry)
XX
XX Antisense sequence #45 used to inhibit telomerase activity.
XX
XX Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;
XX inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;
XX AIDS; HIV; fungal infection; forensic identification; detect; tumour;
XX paternity testing; ss.
XX
XX OS Synthetic.
XX
XX Key Location/Qualifiers
XX misc_feature 1..15
XX /tag= a
XX /note= "Phosphorothioate internucleotide linkages"
XX
XX US6046307-A.
XX
XX 04-APR-2000.
XX
XX 09-APR-1997; 97US-00838545.
XX
XX

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PR 09-APR-1996; 96US-00630019.
XX (TEXA ) UNIV TEXAS SYSTEM.
XX
XX Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;
XX WPI; 2000-292432/25.
XX
XX New peptide nucleic acid (PNA) compounds that inhibit telomerase activity
XX in mammalian cells is useful as probes to detect the RNA component of a
XX mammalian telomerase.
XX
XX Example 1; Col 27-28; 45pp; English.
XX
XX The present sequence represents an antisense oligonucleotide used as a
XX control sequence alongside a peptide nucleic acid molecule which
XX hybridises to the mRNA component of mammalian telomerase, and inhibits
XX telomerase activity. Telomerase is a ribonucleoprotein enzyme that
XX synthesizes one strand of the telomeric DNA, using as a template an 11
XX nucleotide sequence contained within the RNA component of the enzyme. The
XX invention relates to PNA molecules having a sequence of no more than 25
XX bases, which include the sequence GTTAGG. The uncharged nature of the PNA
XX backbone increases the melting temperature of associating strands,
XX increases the rate of association with targeted nucleic acids, and
XX affords greater resistance of degradation by proteases or nucleases. The
XX therapeutic PNAs may be used for treating disease conditions such as
XX cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human
XX immunodeficiency virus (HIV) infection/AIDS (acquired immunodeficiency
XX syndrome) and associated pathologies, fungal infections, and other
XX diseases characterized by abnormal telomere metabolism or telomerase
XX activity, in combination with antineoplastic and other cytotoxic or
XX cytostatic agents, antifungal agents, and other nucleotides. PNAs may be
XX used for molecular diagnostics, labelled PNAs are used as hybridization
XX probes to detect or quantitate polynucleotides having a human telomerase
XX RNA (hTR) sequence. PNA probes are also used for forensic identification
XX of individuals, e.g. paternity testing, based on hTR gene restriction
XX fragment length polymorphism (RFLP) pattern. PNAs are also useful as
XX probes to detect the RNA component of a mammalian telomerase and as
XX inhibitors of telomerase activity. The method of the present invention
XX allows cancerous conditions to be detected with increased confidence and
XX possibly at an earlier stage, before cells are detected as cancerous
XX based on pathological characteristics. The diagnostic and prognostic
XX methods of the present invention can be used to detect an immortal or
XX neoplastic cell or tumour tissue or cancer of any origin, provided the
XX cell expresses telomerase activity and its RNA component
XX
XX SQ Sequence 15 BP; 3 A; 2 C; 5 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 3.3%; Score 15; DB 1; Length 15;
XX Best Local Similarity 100.0%; Pred. No. 2.3e+02;
XX Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 46 CTAACCCCTAACTGAG 60
Db 15 CTAACCCCTAACTGAG 1
XX
XX RESULT 302
XX AAA37545/C
XX ID AAA37545 standard; DNA; 15 BP.
XX
XX AC AAA37545;
XX
XX 15-AUG-2000 (first entry)
XX
XX PNA sequence #2 used to inhibit telomerase activity.
XX
XX Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;
XX inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;
XX AIDS; HIV; fungal infection; forensic identification; detect; tumour;
XX paternity testing; ss.
XX
XX OS Synthetic.

```

```

XX Key Location/Qualifiers
FH misc_feature 1. .15
FT /*tag= a
FT /note= "Peptide nucleic acid molecule, where N-(2-
FT aminoethyl)glycine units are linked to nucleotide bases
FT via glycine amino N through a methylenecarbonyl linker"
XX
XX US6046307-A.
XX
XX 04-APR-2000.
XX
XX 09-APR-1997; 97US-00838545.
XX
XX 09-APR-1996; 96US-00630019.
XX
XX (TEXA ) UNIV TEXAS SYSTEM.
XX
XX Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;
XX WPI; 2000-292432/25.
XX
XX New peptide nucleic acid (PNA) compounds that inhibit telomerase activity
XX in mammalian cells is useful as probes to detect the RNA component of a
XX mammalian telomerase.
XX
XX Claim 6; Col 71; 45pp; English.
XX
XX The present sequence represents a peptide nucleic acid molecule which
XX hybridises to the mRNA component of mammalian telomerase, and inhibits
XX telomerase activity. Telomerase is a ribonucleoprotein enzyme that
XX synthesizes one strand of the telomeric DNA, using as a template an 11
XX nucleotide sequence contained within the RNA component of the enzyme. The
XX invention relates to PNA molecules having a sequence of no more than 25
XX bases, which include the sequence GTTAGG. The uncharged nature of the PNA
XX backbone increases the melting temperature of associating strands,
XX increases the rate of association with targeted nucleic acids, and
XX affords greater resistance of degradation by proteases or nucleases. The
XX therapeutic PNAs may be used for treating disease conditions such as
XX cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human
XX immunodeficiency virus (HIV) infection/AIDS (acquired immunodeficiency
XX syndrome) and associated pathologies, fungal infections, and other
XX diseases characterized by abnormal telomere metabolism or telomerase
XX activity, in combination with antineoplastic and other cytotoxic or
XX cytostatic agents, antifungal agents, and other nucleotides. PNAs may be
XX used for molecular diagnostics, labelled PNAs are used as hybridization
XX probes to detect or quantitate polynucleotides having a human telomerase
XX RNA (htr) sequence. PNA probes are also used for forensic identification
XX of individuals, e.g. paternity testing, based on htr gene restriction
XX fragment length polymorphism (RFLP) pattern. PNAs are also useful as
XX probes to detect the RNA component of a mammalian telomerase and as
XX inhibitors of telomerase activity. The method of the present invention
XX allows cancerous conditions to be detected with increased confidence and
XX possibly at an earlier stage, before cells are detected as cancerous
XX based on pathological characteristics. The diagnostic and prognostic
XX methods of the present invention can be used to detect an immortal or
XX neoplastic cell or tumour tissue or cancer of any origin, provided the
XX cell expresses telomerase activity and its RNA component
XX
XX Sequence 15 BP; 3 A; 2 C; 5 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 3.3%; Score 15; DB 1; Length 15;
XX Best Local Similarity 100.0%; Pred. No. 2.3e+02;
XX Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 46 CTAACCCCTAACTGAG 60
XX |||||
XX Db 15 CTAACCCCTAACTGAG 1
XX
XX RESULT 303
XX AAA37548/C
XX ID AAA37548 standard; DNA; 15 BP.

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XX AAA37548;
XX
XX 15-AUG-2000 (first entry)
XX
XX PNA sequence #5 used to inhibit telomerase activity.
XX
XX Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;
XX inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;
XX AIDS; HIV; fungal infection; forensic identification; detect; tumour;
XX paternity testing; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FH misc_feature 1. .15
FT /*tag= a
FT /note= "Peptide nucleic acid molecule, where N-(2-
FT aminoethyl)glycine units are linked to nucleotide bases
FT via glycine amino N through a methylenecarbonyl linker"
XX
XX US6046307-A.
XX
XX 04-APR-2000.
XX
XX 09-APR-1997; 97US-00838545.
XX
XX 09-APR-1996; 96US-00630019.
XX
XX (TEXA ) UNIV TEXAS SYSTEM.
XX
XX Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;
XX WPI; 2000-292432/25.
XX
XX New peptide nucleic acid (PNA) compounds that inhibit telomerase activity
XX in mammalian cells is useful as probes to detect the RNA component of a
XX mammalian telomerase.
XX
XX Claim 6; Col 71; 45pp; English.
XX
XX The present sequence represents a peptide nucleic acid molecule which
XX hybridises to the mRNA component of mammalian telomerase, and inhibits
XX telomerase activity. Telomerase is a ribonucleoprotein enzyme that
XX synthesizes one strand of the telomeric DNA, using as a template an 11
XX nucleotide sequence contained within the RNA component of the enzyme. The
XX invention relates to PNA molecules having a sequence of no more than 25
XX bases, which include the sequence GTTAGG. The uncharged nature of the PNA
XX backbone increases the melting temperature of associating strands,
XX increases the rate of association with targeted nucleic acids, and
XX affords greater resistance of degradation by proteases or nucleases. The
XX therapeutic PNAs may be used for treating disease conditions such as
XX cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human
XX immunodeficiency virus (HIV) infection/AIDS (acquired immunodeficiency
XX syndrome) and associated pathologies, fungal infections, and other
XX diseases characterized by abnormal telomere metabolism or telomerase
XX activity, in combination with antineoplastic and other cytotoxic or
XX cytostatic agents, antifungal agents, and other nucleotides. PNAs may be
XX used for molecular diagnostics, labelled PNAs are used as hybridization
XX probes to detect or quantitate polynucleotides having a human telomerase
XX RNA (htr) sequence. PNA probes are also used for forensic identification
XX of individuals, e.g. paternity testing, based on htr gene restriction
XX fragment length polymorphism (RFLP) pattern. PNAs are also useful as
XX probes to detect the RNA component of a mammalian telomerase and as
XX inhibitors of telomerase activity. The method of the present invention
XX allows cancerous conditions to be detected with increased confidence and
XX possibly at an earlier stage, before cells are detected as cancerous
XX based on pathological characteristics. The diagnostic and prognostic
XX methods of the present invention can be used to detect an immortal or
XX neoplastic cell or tumour tissue or cancer of any origin, provided the
XX cell expresses telomerase activity and its RNA component
XX
XX Sequence 15 BP; 5 A; 1 C; 5 G; 4 T; 0 U; 0 Other;
XX

```

Query Match 3.3%; Score 15; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGCTTAACCCCTAAC 56  
 DB 15 TTGCTTAACCCCTAAC 1

RESULT 304  
 AAS15427/C  
 ID AAS15427 standard; DNA; 15 BP.  
 XX AC AAS15427;  
 XX 14-FEB-2002 (first entry)  
 XX PNA XIII inhibiting human and mammalian telomerase activity.  
 XX Mammalian; peptide nucleic acid; probe; forensic; paternity testing;  
 KW human telomerase RNA component; hTR gene RFLP pattern; cancer;  
 KW inflammation; lymphoproliferative disease; autoimmune disease;  
 KW neurodegenerative disease; neoplasia; hyperplasia; HIV; AIDS;  
 KW human immunodeficiency virus; acquired immunodeficiency syndrome;  
 KW telomere metabolism; mutant; cytostatic; anti-inflammatory;  
 KW immunosuppressive; polyamide backbone; ss.  
 XX Homo sapiens.  
 OS Synthetic.  
 FH Key Location/Qualifiers  
 FT modified\_base 1..15  
 FT /\*tag= a  
 FT /note= "This sequence is a peptide nucleic acid, i.e. it  
 FT contains a polyamide backbone instead of a deoxyribose  
 FT backbone"

US6294650-B1.  
 XX 25-SEP-2001.  
 XX 08-JUL-1999; 99US-00349532.  
 XX 09-APR-1996; 96US-00630019.  
 XX 09-APR-1997; 97US-00838545.  
 XX (TEXA ) UNIV TEXAS SYSTEM.  
 XX Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;  
 XX WPI; 2001-638024/73.  
 XX New peptide nucleic acids that hybridizes to the RNA component of  
 PT mammalian telomerase, useful for treating or preventing cancer,  
 PT inflammation, lymphoproliferative diseases, autoimmune disease, or  
 PT neurodegenerative diseases.  
 XX Claim 7; Col 73; 46pp; English.

The present invention relates to peptide nucleic acids (PNAs), comprising  
 a sequence of 6-25 nucleobases, that inhibit telomerase activity in  
 mammalian cells by hybridizing to the RNA component of mammalian  
 telomerase. The PNAs are useful as probes to detect the RNA component of  
 mammalian telomerase and as inhibitors of telomerase activity, or to  
 detect and/or quantitate polynucleotide having the human telomerase RNA  
 component (hTR) sequence, as well as in forensic identification of  
 individuals, such as paternity testing or identification of criminal  
 suspects or unknown descendants based on the hTR gene RFLP pattern. The  
 PNA can be further used for treating or preventing cancer, inflammation,  
 lymphoproliferative diseases, autoimmune disease, or neurodegenerative  
 diseases. The PNAs in combination with other pharmaceuticals (such as  
 antineoplastic or cytostatic agents) can be used for treating neoplasia,  
 hyperplasia, human immunodeficiency virus (HIV) infections, acquired

CC hyperplasia, human immunodeficiency virus (HIV) infections, acquired  
 CC immunodeficiency syndrome (AIDS) and associated pathologies, and other  
 CC diseases characterised by abnormal telomere metabolism or telomerase  
 CC activity. The present sequence represents one of the PNA sequences of the  
 CC invention  
 XX  
 SQ Sequence 15 BP; 5 A; 1 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 3.3%; Score 15; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGCTTAACCCCTAAC 56  
 DB 15 TTGCTTAACCCCTAAC 1

RESULT 305  
 AAS15448  
 ID AAS15448 standard; DNA; 15 BP.  
 XX AC AAS15448;  
 XX 14-FEB-2002 (first entry)  
 XX Oligonucleotide #4 used in melting temperature studies of PNAs.  
 DE Mammalian; paternity testing; human telomerase RNA component;  
 KW hTR gene RFLP pattern; cancer; inflammation; forensic;  
 KW lymphoproliferative disease; autoimmune disease; hyperplasia;  
 KW neurodegenerative disease; neoplasia; HIV; AIDS; cytostatic;  
 KW human immunodeficiency virus; acquired immunodeficiency syndrome;  
 KW telomere metabolism; anti-inflammatory; immunosuppressive; ss.  
 XX Homo sapiens.  
 OS Synthetic.  
 XX US6294650-B1.  
 XX 25-SEP-2001.  
 XX 08-JUL-1999; 99US-00349532.  
 XX 09-APR-1996; 96US-00630019.  
 XX 09-APR-1997; 97US-00838545.  
 XX (TEXA ) UNIV TEXAS SYSTEM.  
 XX Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;  
 XX WPI; 2001-638024/73.  
 XX New peptide nucleic acids that hybridizes to the RNA component of  
 PT mammalian telomerase, useful for treating or preventing cancer,  
 PT inflammation, lymphoproliferative diseases, autoimmune disease, or  
 PT neurodegenerative diseases.  
 XX Example 2; Col 34; 46pp; English.

The present invention relates to peptide nucleic acids (PNAs), comprising  
 a sequence of 6-25 nucleobases, that inhibit telomerase activity in  
 mammalian cells by hybridizing to the RNA component of mammalian  
 telomerase. The PNAs are useful as probes to detect the RNA component of  
 mammalian telomerase and as inhibitors of telomerase activity, or to  
 detect and/or quantitate polynucleotide having the human telomerase RNA  
 component (hTR) sequence, as well as in forensic identification of  
 individuals, such as paternity testing or identification of criminal  
 suspects or unknown descendants based on the hTR gene RFLP pattern. The  
 PNA can be further used for treating or preventing cancer, inflammation,  
 lymphoproliferative diseases, autoimmune disease, or neurodegenerative  
 diseases. The PNAs in combination with other pharmaceuticals (such as  
 antineoplastic or cytostatic agents) can be used for treating neoplasia,  
 hyperplasia, human immunodeficiency virus (HIV) infections, acquired

CC immunodeficiency syndrome (AIDS) and associated pathologies, and other  
 CC diseases characterised by abnormal telomere metabolism or telomerase  
 CC activity. The present sequence representing a DNA oligonucleotide is  
 CC complementary to some of the PNAs of the present invention, and is used  
 CC in melting temperature studies

XX  
 SQ Sequence 15 BP; 6 A; 4 C; 3 G; 2 T; 0 U; 0 Other;  
 Query Match 3.3%; Score 15; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 49 ACCCTAACTGAGAAG 63  
 Db 1 ACCCTAACTGAGAAG 15  
 |||||

RESULT 306  
 AAS15424/C  
 ID AAS15424 standard; DNA; 15 BP.  
 XX  
 AC AAS15424;  
 XX  
 DT 14-FEB-2002 (first entry)  
 XX  
 DE PNA VII inhibiting human and mammalian telomerase activity.  
 XX  
 KW Mammalian; peptide nucleic acid; probe; forensic; paternity testing;  
 KW human telomerase RNA component; hTR gene RFLP pattern; cancer;  
 KW inflammation; lymphoproliferative disease; autoimmune disease;  
 KW neurodegenerative disease; neoplasia; hyperplasia; HIV; AIDS;  
 KW human immunodeficiency virus; acquired immunodeficiency syndrome;  
 KW telomere metabolism; mutant; cytostatic; anti-inflammatory;  
 KW immunosuppressive; polyamide backbone; ss.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..15  
 FT /tag= a  
 FT /note= "This sequence is a peptide nucleic acid, i.e. it  
 FT contains a polyamide backbone instead of a deoxyribose  
 FT backbone"  
 XX  
 XX  
 XX US6294650-B1.  
 XX  
 XX  
 PD 25-SEP-2001.  
 XX  
 XX 08-JUL-1999; 99US-00349532.  
 XX  
 XX 09-APR-1996; 96US-00630019.  
 PR 09-APR-1997; 97US-00838545.  
 XX  
 XX (TEXA ) UNIV TEXAS SYSTEM.  
 XX  
 XX Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;  
 XX WPI; 2001-638024/73.  
 XX  
 XX New peptide nucleic acids that hybridizes to the RNA component of  
 PT mammalian telomerase, useful for treating or preventing cancer,  
 PT inflammation, lymphoproliferative diseases, autoimmune disease, or  
 PT neurodegenerative diseases.  
 XX  
 XX Claim 7; Col 73; 46pp; English.  
 PS  
 XX The present invention relates to peptide nucleic acids (PNAs), comprising  
 CC a sequence of 6-25 nucleobases, that inhibit telomerase activity in  
 CC mammalian cells by hybridising to the RNA component of mammalian  
 CC telomerase. The PNAs are useful as probes to detect the RNA component of  
 CC mammalian telomerase and as inhibitors of telomerase activity, or to  
 CC detect and/or quantitate polynucleotide having the human telomerase RNA

CC component (hTR) sequence, as well as in forensic identification of  
 CC individuals, such as paternity testing or identification of criminal  
 CC suspects or unknown descendants based on the hTR gene RFLP pattern. The  
 CC PNA can be further used for treating or preventing cancer, inflammation,  
 CC lymphoproliferative diseases, autoimmune disease, or neurodegenerative  
 CC diseases. The PNAs in combination with other pharmaceuticals (such as  
 CC antineoplastic or cytostatic agents) can be used for treating neoplasia,  
 CC hyperplasia, human immunodeficiency virus (HIV) infections, acquired  
 CC immunodeficiency syndrome (AIDS) and associated pathologies, and other  
 CC diseases characterised by abnormal telomere metabolism or telomerase  
 CC activity. The present sequence represents one of the PNA sequences of the  
 CC invention

XX  
 SQ Sequence 15 BP; 3 A; 2 C; 5 G; 5 T; 0 U; 0 Other;  
 Query Match 3.3%; Score 15; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAACTGAG 60  
 Db 15 CTAACCCCTAACTGAG 1  
 |||||

RESULT 307  
 AAS15458/C  
 ID AAS15458 standard; DNA; 15 BP.  
 XX  
 AC AAS15458;  
 XX  
 DT 14-FEB-2002 (first entry)  
 XX  
 XX  
 DE Phosphorothioate (PS) oligomer II used to inhibit telomerase activity.  
 XX  
 KW Mammalian; forensic; paternity testing; human telomerase RNA component;  
 KW hTR gene RFLP pattern; cancer; inflammation; lymphoproliferative disease;  
 KW autoimmune disease; neurodegenerative disease; neoplasia; hyperplasia;  
 KW HIV; AIDS; human immunodeficiency virus; telomere metabolism; mutant;  
 KW acquired immunodeficiency syndrome; cytostatic; anti-inflammatory;  
 KW immunosuppressive; phosphorothioate; ss.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 XX  
 FH Key Location/Qualifiers  
 FT modified\_base 1..15  
 FT /tag= a  
 FT /label= OTHER  
 FT /note= "Phosphorothioate internucleotide linkages"  
 XX  
 XX US6294650-B1.  
 XX  
 XX 25-SEP-2001.  
 XX  
 XX 08-JUL-1999; 99US-00349532.  
 XX  
 XX 09-APR-1996; 96US-00630019.  
 PR 09-APR-1997; 97US-00838545.  
 XX  
 XX (TEXA ) UNIV TEXAS SYSTEM.  
 XX  
 XX Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;  
 XX WPI; 2001-638024/73.  
 XX  
 XX New peptide nucleic acids that hybridizes to the RNA component of  
 PT mammalian telomerase, useful for treating or preventing cancer,  
 PT inflammation, lymphoproliferative diseases, autoimmune disease, or  
 PT neurodegenerative diseases.  
 XX  
 XX Example 1; Col 29; 46pp; English.  
 PS  
 XX The present invention relates to peptide nucleic acids (PNAs), comprising

CC a sequence of 6-25 nucleobases, that inhibit telomerase activity in  
 CC mammalian cells by hybridising to the RNA component of mammalian  
 CC telomerase. The PNAs are useful as probes to detect the RNA component of  
 CC mammalian telomerase and as inhibitors of telomerase activity, or to  
 CC detect and/or quantitate polynucleotide having the human telomerase RNA  
 CC component (hTR) sequence, as well as in forensic identification of  
 CC individuals, such as paternity testing or identification of criminal  
 CC suspects or unknown descendants based on the hTR gene RFLP pattern. The  
 CC PNA can be further used for treating or preventing cancer, inflammation,  
 CC lymphoproliferative diseases, autoimmune disease, or neurodegenerative  
 CC diseases. The PNAs in combination with other pharmaceuticals (such as  
 CC antineoplastic or cytostatic agents) can be used for treating neoplasia,  
 CC hyperplasia, human immunodeficiency virus (HIV) infections, acquired  
 CC immunodeficiency syndrome (AIDS) and associated pathologies, and other  
 CC diseases characterized by abnormal telomere metabolism or telomerase  
 CC activity. The present sequence represents a phosphorothioate (PS)  
 CC oligomer used to inhibit telomerase activity in the methods of the  
 CC present invention

XX Sequence 15 BP; 3 A; 2 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 3.3%; Score 15; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAAGTGG 60  
 Db 15 CTAACCCCTAAGTGG 1

RESULT 308  
 AAS15927/C  
 ID AAS15927 standard; DNA; 15 BP.

XX AAS15927;

DT 27-FEB-2002 (first entry)

DE Human telomerase polynucleotide inhibitor #8.

XX Human; telomerase; hTR; cytostatic; anti-inflammatory; adenocarcinoma;  
 KW breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease;  
 KW fertility; inflammatory condition; tumour; cancer; veterinary;  
 KW immunosuppression; telomerase inhibitor; ss.

XX Homo sapiens.  
 OS Synthetic.

XX Key Location/Qualifiers  
 FH modified\_base 1..15  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "N3'-P5' phosphoramidate linkages"

XX WO200174136-A2.

XX 11-OCT-2001.

XX 30-MAR-2001; 2001WO-US010476.

XX 31-MAR-2000; 2000US-00540119.

XX (GERO-) GERON CORP.

XX Gryaznov SM, Pruzan R, Weinrich SL;

XX WPI; 2001-656955/75.

XX New polynucleotide useful for inhibiting telomerase activity in cells, or  
 PT for treating telomerase-mediated condition or disease, such as cancers,  
 PT tumors, Hodgkin's disease, or inflammatory conditions.

PS Claim 8; Page 36; 48pp; English.

XX The invention relates to polynucleotide inhibitors (I) and methods for  
 CC inhibiting telomerase activity. (I) are useful in inhibiting telomerase  
 CC activity and proliferation of a telomerase positive cell, and in  
 CC manufacturing a medicament for inhibiting telomerase activity in a cell  
 CC and in treating telomerase-mediated condition or disease, such as  
 CC adenocarcinoma of breast, prostate or colon, mixed cell leukaemia,  
 CC Hodgkin's disease, fertility and inflammatory conditions. (I) are also  
 CC useful in treating a tumour or in manufacturing a medicament for the  
 CC treatment of tumour. The polynucleotide inhibitors may also be used in  
 CC diagnostic assays for detecting RNA or DNA. Inhibition of telomerase  
 CC activity in cells in vivo is useful in prophylactic and therapeutic  
 CC methods of treating cancer and other disorders involving inappropriate  
 CC expression of telomerase, and in treating veterinary proliferative  
 CC diseases. Inhibition of telomerase in haematopoietic stem cells is useful  
 CC for immunosuppression and for selectively down-regulating specific  
 CC branches of the immune system. The present sequence represents human  
 CC telomerase polynucleotide inhibitor #8, as described in the method of the  
 CC invention

XX Sequence 15 BP; 3 A; 2 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 3.3%; Score 15; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 137 CCTGCCGCTTCCAC 151  
 Db 15 CCTGCCGCTTCCAC 1

RESULT 309

AAS15931/C

ID AAS15931 standard; DNA; 15 BP.

XX AAS15931;

DT 27-FEB-2002 (first entry)

DE Human telomerase polynucleotide inhibitor #12.

XX Human; telomerase; hTR; cytostatic; anti-inflammatory; adenocarcinoma;  
 KW breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease;  
 KW fertility; inflammatory condition; tumour; cancer; veterinary;  
 KW immunosuppression; telomerase inhibitor; ss.

XX Homo sapiens.  
 OS Synthetic.

XX Key Location/Qualifiers  
 FH modified\_base 1..15  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "N3'-P5' phosphoramidate linkages"

XX WO200174136-A2.

XX 11-OCT-2001.

XX 30-MAR-2001; 2001WO-US010476.

XX 31-MAR-2000; 2000US-00540119.

XX (GERO-) GERON CORP.

XX Gryaznov SM, Pruzan R, Weinrich SL;

XX WPI; 2001-656955/75.

XX New polynucleotide useful for inhibiting telomerase activity in cells, or  
 PT for treating telomerase-mediated condition or disease, such as cancers,  
 PT tumors, Hodgkin's disease, or inflammatory conditions.

PS Example 3; Page 32; 48pp; English.

XX The invention relates to polynucleotide inhibitors (I) and methods for  
 CC inhibiting telomerase activity. (I) are useful in inhibiting telomerase  
 CC activity and proliferation of a telomerase positive cell, and in  
 CC manufacturing a medicament for inhibiting telomerase activity in a cell  
 CC and in treating telomerase-mediated condition or disease, such as  
 CC adenocarcinoma of breast, prostate or colon, mixed cell leukaemia,  
 CC Hodgkin's disease, fertility and inflammatory conditions. (I) are also  
 CC useful in treating a tumour or in manufacturing a medicament for the  
 CC treatment of tumour. The polynucleotide inhibitors may also be used in  
 CC diagnostic assays for detecting RNA or DNA. Inhibition of telomerase  
 CC activity in cells in vivo is useful in prophylactic and therapeutic  
 CC methods of treating cancer and other disorders involving inappropriate  
 CC expression of telomerase, and in treating veterinary proliferative  
 CC diseases. Inhibition of telomerase in haematopoietic stem cells is useful  
 CC for immunosuppression and for selectively down-regulating specific  
 CC branches of the immune system. The present sequence represents human  
 CC telomerase polynucleotide inhibitor #12, as described in the method of  
 CC the invention

SQ Sequence 15 BP; 6 A; 1 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 3.3%; Score 15; DB 1; Length 15;  
 Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 147 TCCACCGTTCATCT 161

Db 15 TCCACCGTTCATCT 1

RESULT 310

AAS15932/C

ID AAS15932 standard; DNA; 15 BP.

AC AAS15932;

XX 27-FEB-2002 (first entry)

DE Human telomerase polynucleotide inhibitor #13.

XX Human; telomerase; hTR; cytostatic; anti-inflammatory; adenocarcinoma;  
 KW breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease;  
 KW fertility; inflammatory condition; tumour; cancer; veterinary;  
 KW immunosuppression; telomerase inhibitor; ss.

XX Homo sapiens.

OS Synthetic.

XX Key Location/Qualifiers  
 FH modified\_base 1..15

FT /\*tag= a

FT /mod\_base= OTHER

FT /notê= "N3'-P5' phosphoramidate linkages"

XX WO200174136-A2.

PN 11-OCT-2001.

XX 30-MAR-2001; 2001WO-US010476.

XX 31-MAR-2000; 2000US-00540119.

XX (GERO-) GERON CORP.

XX Gryaznov SM, Pruzan R, Weinrich SL;

XX WPI; 2001-656955/75.

XX New polynucleotide useful for inhibiting telomerase activity in cells, or  
 PT for treating telomerase-mediated condition or disease, such as cancers,  
 PT tumors, Hodgkin's disease, or inflammatory conditions.

XX

PS Example 3; Page 32; 48pp; English.

XX The invention relates to polynucleotide inhibitors (I) and methods for  
 CC inhibiting telomerase activity. (I) are useful in inhibiting telomerase  
 CC activity and proliferation of a telomerase positive cell, and in  
 CC manufacturing a medicament for inhibiting telomerase activity in a cell  
 CC and in treating telomerase-mediated condition or disease, such as  
 CC adenocarcinoma of breast, prostate or colon, mixed cell leukaemia,  
 CC Hodgkin's disease, fertility and inflammatory conditions. (I) are also  
 CC useful in treating a tumour or in manufacturing a medicament for the  
 CC treatment of tumour. The polynucleotide inhibitors may also be used in  
 CC diagnostic assays for detecting RNA or DNA. Inhibition of telomerase  
 CC activity in cells in vivo is useful in prophylactic and therapeutic  
 CC methods of treating cancer and other disorders involving inappropriate  
 CC expression of telomerase, and in treating veterinary proliferative  
 CC diseases. Inhibition of telomerase in haematopoietic stem cells is useful  
 CC for immunosuppression and for selectively down-regulating specific  
 CC branches of the immune system. The present sequence represents human  
 CC telomerase polynucleotide inhibitor #13, as described in the method of  
 CC the invention

.SQ Sequence 15 BP; 5 A; 1 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 3.3%; Score 15; DB 1; Length 15;

Best Local Similarity 100.0%; Pred. No. 2.3e+02;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 144 CCTTCCACCGTTCAT 158

Db 15 CCTTCCACCGTTCAT 1

RESULT 311

ADP87875/C

ID ADP87875 standard; DNA; 15 BP.

AC ADP87875;

XX 26-AUG-2004 (first entry)

DE 2',5'-oligoadenylic acid analog related oligonucleotide #2.

XX Cytostatic; virucide; 2'; 5'-oligoadenylic acid analog; antitumour;  
 KW antiviral; cancer; ss.

XX Synthetic.

XX Key Location/Qualifiers  
 FH modified\_base 1..15

FT /\*tag= a

FT /mod\_base= OTHER

FT /notê= "2',4'-oxyethylene linkage in the sugar residues"

FT modified\_base 15

FT /\*tag= b

FT /mod\_base= OTHER

FT /notê= "A-hydroxyethyl phosphate"

XX WO2004046161-A1.

XX 03-JUN-2004.

XX 19-NOV-2003; 2003WO-JP014748.

XX 19-NOV-2002; 2002JP-00334731.

XX (SANY ) SANKYO CO LTD.

XX Koizumi M, Morita K;

XX WPI; 2004-460494/43.

XX Stable 2',5'-oligoadenylic acid analogs containing natural and modified



PT nucleic acid units as well as unusual phosphate groups with excellent  
PT activity particularly antitumor, applicable in cancer or antiviral  
XX therapy.  
XX  
PS Disclosure; Page 100; 220pp; Japanese.  
XX  
XX The present invention relates to novel 2',5'-oligoadenylic acid analogs  
CC and their pharmacologically- acceptable salts. The analogs are stable  
CC with superior antitumor and antiviral activity and so are useful in  
CC cancer or antiviral therapy e.g. as antisense drugs. The present sequence  
CC was used to illustrate the invention.  
XX  
XX  
SQ Sequence 15 BP; 5 A; 3 C; 7 G; 0 T; 0 U; 0 Other;  
  
Query Match 3.3%; Score 15; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
Qy 80 TTTTGCTCCCGCGC 94  
|||||  
Db 15 TTTTGCTCCCGCGC 1  
  
RESULT 312  
ADP87878/C  
ID ADP87878 standard; DNA; 15 BP.  
XX  
XX  
AC ADP87878;  
XX  
XX 26-AUG-2004 (first entry)  
XX  
DE 2',5'-oligoadenylic acid analog related oligonucleotide #5.  
XX  
XX Cytostatic; virucide; 2'; 5'-oligoadenylic acid analog; antitumor;  
XX antiviral; cancer; ss.  
XX  
XX Synthetic.  
XX  
XX  
XX Key Location/Qualifiers  
FH modified\_base 1..5  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "2',4'-oxyethylene linkage in the sugar residues"  
FT modified\_base 6..11  
FT /\*tag= d  
FT /mod\_base= OTHER  
FT /note= "phosphorothioate backbone"  
FT modified\_base 11..15  
FT /\*tag= c  
FT /mod\_base= OTHER  
FT /note= "2',4'-oxyethylene linkage in the sugar residues"  
FT modified\_base 15  
FT /\*tag= b  
FT /mod\_base= OTHER  
FT /note= "A-hydroxyethyl phosphate"  
XX  
XX WO2004046161-A1.  
XX  
XX 03-JUN-2004.  
XX  
XX 19-NOV-2003; 2003WO-JP014748.  
XX  
XX 19-NOV-2002; 2002JP-00334731.  
XX  
XX (SANY ) SANKYO CO LTD.  
XX  
XX Koizumi M, Morita K;  
XX  
XX WPI; 2004-460494/43.  
XX  
XX Stable 2',5'-oligoadenylic acid analogs containing natural and modified  
PT nucleic acid units as well as unusual phosphate groups with excellent  
PT activity particularly antitumor, applicable in cancer or antiviral

PT therapy.  
XX  
XX Disclosure; Page 100; 220pp; Japanese.  
XX  
XX The present invention relates to novel 2',5'-oligoadenylic acid analogs  
CC and their pharmacologically- acceptable salts. The analogs are stable  
CC with superior antitumor and antiviral activity and so are useful in  
CC cancer or antiviral therapy e.g. as antisense drugs. The present sequence  
CC was used to illustrate the invention.  
XX  
XX  
SQ Sequence 15 BP; 5 A; 3 C; 7 G; 0 T; 0 U; 0 Other;  
  
Query Match 3.3%; Score 15; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
Qy 80 TTTTGCTCCCGCGC 94  
|||||  
Db 15 TTTTGCTCCCGCGC 1  
  
RESULT 313  
AAV27891  
ID AAV27891 standard; DNA; 18 BP.  
XX  
XX  
AC AAV27891;  
XX  
XX 25-MAR-2003 (revised)  
DT 12-OCT-1998 (first entry)  
XX  
XX Human telomerase antisense RNA primer.  
DE  
XX TP2; human; telomerase protein 2; cancer; AIDS; ageing; therapy; PCR;  
KW primer; ss.  
KW  
XX Synthetic.  
OS  
OS Homo sapiens.  
XX  
XX WO9821343-A1.  
XX  
XX 22-MAY-1998.  
PD  
XX  
XX 13-NOV-1997; 97WO-US021248.  
PF  
XX 15-NOV-1996; 96US-00751189.  
PR 11-JUN-1997; 97US-00873039.  
PR 16-OCT-1997; 97US-00951733.  
XX  
XX (AMGE-) AMGEN INC.  
PA (AMGE-) AMGEN CANADA INC.  
XX  
XX Harrington LA, Robinson MO;  
PI  
XX  
XX WPI; 1998-297946/26.  
XX  
XX New nucleic acid encoding human telomerase protein-2 - used for  
PT regulating telomerase activity, e.g. for treating cancer or acquired  
PT immune deficiency syndrome.  
XX  
XX Example 8; Page 91; 150pp; English.  
XX  
XX 2 Primers (see AAV27886 and AAV27887) are used in the PCR amplification  
CC of a 520 bp fragment of telomerase genomic DNA from HeLa cells. The PCR  
CC product was used to prepare 2 DNA constructs, each containing the T7  
CC promoter. One construct (for primers see AAV27888-89) contained DNA which  
CC would generate sense strand human telomerase RNA in a transcription  
CC reaction. The other construct (for primers see AAV27890-91) contained DNA  
CC which would generate antisense strand human telomerase RNA in a  
CC transcription reaction. The human telomerase RNA was used for in vitro  
CC assays to demonstrate that wild-type TP2 and sense telomerase RNA are  
CC required for telomerase activity. Novel TP2 can be used to develop  
CC products that regulate telomerase activity, useful e.g. for treating  
CC cancer, AIDS and ageing disorders. (Updated on 25-MAR-2003 to correct PR

CC	field.)
XX	
SQ	Sequence 18 BP; 1 A; 5 C; 10 G; 2 T; 0 U; 0 Other;
	Query Match            3.3%; Score 15; DB 1; Length 18;
	Best Local Similarity 100.0%; Pred. No. 2.9e+02;
	Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY	11 GGGTGGGCTGGAG 25 
Db	4 GGGTGGGCTGGAG 18 
RESULT 314	
ADK20128/c	
ID	ADK20128 standard; DNA; 20 BP.
AC	ADK20128;
XX	
DT	18-NOV-2004 (first entry)
XX	
DE	Acy1-coenzyme A synthetase 1, ACS1, antisense oligonucleotide #205.
XX	
KW	acyl-coenzyme A synthetase 1; ACS1; diabetes; obesity;
KW	metabolic syndrome X; cardiovascular disorder; cancer; infection;
KW	inflammation; tumour; antisense; ss.
OS	Synthetic.
XX	
PN	WO2004016749-A2.
XX	
PD	26-FEB-2004.
XX	
Pf	14-AUG-2003; 2003WO-US025389.
XX	
PR	14-AUG-2002; 2002US-0403591P.
XX	
PA	(PHAA ) PHARMACIA CORP.
XX	
PI	Ross SA;
XX	
DR	WPI; 2004-203782/19.
XX	
PT	New antisense compounds targeted to nucleic acid molecules encoding acyl-
PT	coenzyme A synthetase 1 (ACS1), useful for treating diseases or
PT	conditions associated with aberrant expression of ACS1, e.g. diabetes,
PT	obesity or cancer.
XX	
PS	Claim 3; SEQ ID NO 205; 940pp; English.
XX	
PI	Ross SA;
XX	
DR	WPI; 2004-203782/19.
XX	
PT	New antisense compounds targeted to nucleic acid molecules encoding acyl-
PT	coenzyme A synthetase 1 (ACS1), useful for treating diseases or
PT	conditions associated with aberrant expression of ACS1, e.g. diabetes,
PT	obesity or cancer.
XX	
PS	Claim 3; SEQ ID NO 205; 940pp; English.
XX	
CC	The invention relates to an antisense compound targeted to a nucleic acid
CC	molecule encoding acyl-coenzyme A synthetase 1 (ACS1). The antisense
CC	compound specifically hybridises with and inhibits the expression of
CC	ACS1. The antisense oligonucleotides or compounds are useful for
CC	inhibiting the expression of acyl-coenzyme A synthetase 1 (ACS1), and for
CC	treating diseases or conditions associated with aberrant expression of
CC	ACS1, e.g. diabetes, obesity, metabolic syndrome X, cardiovascular
CC	disorder or cancer. The antisense compounds are also useful as research
CC	reagents and kits, or in diagnostic, therapeutic and prophylactic
CC	applications, e.g. to prevent or delay infection, inflammation or tumour
CC	formation. The present sequence represents an acyl-coenzyme A synthetase
CC	1, ACS1, antisense oligonucleotide.
XX	
SQ	Sequence 20 BP; 3 A; 12 C; 2 G; 3 T; 0 U; 0 Other;
	Query Match            3.3%; Score 15; DB 1; Length 20;
	Best Local Similarity 100.0%; Pred. No. 3.3e+02;
	Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY	335 GGGCGAGGCGGAGGT 349 
Db	19 GGGCGAGGCGGAGGT 5 
RESULT 316	
AXX82232/c	
ID	AXX82232 standard; DNA; 18 BP.
XX	
AC	AXX82232;
XX	
DT	18-AUG-1999 (first entry)
XX	
DE	Influenza virus PA gene specific primer.
XX	
KW	Cold-adapted influenza virus; passage culture; PB1 protein; PB1 protein;

KW PA protein; NP protein; M protein; NS protein; NS protein; temperature sensitivity;  
 KW vaccine; flu; influenza; PCR primer; ss.  
 XX Synthetic.  
 OS Influenza virus.  
 XX WO9928445-A1.  
 XX 10-JUN-1999.  
 XX 30-NOV-1998; 98WO-KR000384.  
 XX 29-NOV-1997; 97KR-00064854.  
 XX (CHEI-) CHEIL JEDANG CORP.  
 XX Seong BL, Lee KH, Youn JW, Kim SJ, Cheoun KH, Kim J, Kim HG;  
 XX WPI; 1999-385377/32.  
 XX Cold-adapted influenza viruses useful for the production of protective  
 XX vaccines against flu.  
 XX Example 4; Page 15; 62pp; English.  
 XX The invention relates to cold-adapted influenza viruses prepared by  
 CC passage culture of A/X-31, B/Yamagata/16/88 or B/Lee/40 viruses at low  
 CC temperatures. A cDNA gene of cold-adapted influenza virus H7CA-A101 can  
 CC be selected from a group consisting of PB2 protein gene, PB1 protein  
 CC gene, PA protein gene, NP protein gene, M protein gene and NS protein  
 CC gene (AA82192-X82197). The method is useful for the production of cold-  
 CC adapted influenza virus that exhibit temperature sensitivity and can be  
 CC actively grown in fertilized eggs. The virus is useful for vaccines for  
 CC protection against 'flu. Live vaccines containing cold-adapted viruses  
 CC have several advantages over killed vaccines. It can prevent reduction of  
 CC immunogenicity, which may occur in the killed vaccine where antigenic  
 CC proteins would be denatured at its inactivation. It can also avoid  
 CC hypersensitivity due to the prolonged administration of heterologous  
 CC proteins. It promotes the immunity by inducing IGA and it can be  
 CC administered into a spray formulation via nasal cavity and thus its  
 CC application is convenient for children. It is able to inhibit the growth  
 CC of the wild-type virus and thus its therapeutic effect can be expected.  
 CC Sequences AA82222-X82257 represent PCR primers specific for the various  
 CC genes of influenza virus  
 XX  
 SQ Sequence 18 BP; 8 A; 4 C; 5 G; 1 T; 0 U; 0 Other;  
 Query Match 3.3%; Score 14.8; DB 1; Length 18;  
 Best Local Similarity 88.9%; Pred. No. 3e+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 16; Conservative 0;  
 OY 29 TGGTGGCCATTTTGTGTC 46  
 DB 18 TGCTGGCCATTTCTGTGC 1  
 RESULT 317  
 AA224498/c  
 ID AA224498 standard; DNA; 18 BP.  
 XX  
 AC AA224498;  
 XX  
 DT 15-SEP-2003 (revised)  
 DT 18-FEB-2000 (first entry)  
 XX  
 DE H. capsulatum 5.8S rRNA gene PCR primer HC2.  
 XX  
 KW 5.8S rRNA; detection; environmental sample; public health; soil;  
 KW vegetation; dust; faeces; histoplasmosis; PCR primer; ss.  
 XX  
 OS Ajellomyces capsulatus.  
 XX  
 PN WO9954508-A1.

XX 28-OCT-1999.  
 XX 20-APR-1999; 99WO-US008731.  
 XX 21-APR-1998; 98US-0082477P.  
 XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.  
 XX Schafer MP, Reid TM;  
 XX WPI; 2000-052703/04.  
 XX A novel rapid and sensitive method using PCR for detecting Histoplasma  
 XX capsulatum in samples.  
 XX Claim 2; Page 30; 33pp; English.  
 XX This invention describes a novel rapid and sensitive method for detecting  
 CC Histoplasma capsulatum. The method uses oligonucleotide primers which  
 CC amplify a segment of DNA specific to the H. capsulatum 5.8S rRNA gene.  
 CC The method of the invention can be used to detect H. capsulatum in a wide  
 CC variety of samples. For example, for public health protection  
 CC environmental samples containing soil, vegetation, dust, decaying faeces  
 CC from birds and bats, etc. can be assayed for the presence of the  
 CC pathogen. Additionally, clinical samples drawn from human subjects may be  
 CC analysed e.g. those who are suspected of having contracted fresh  
 CC histoplasmosis as a result of symptomatology, and immune compromised  
 CC individuals who may be at risk of contracting chronic pulmonary or ocular  
 CC histoplasmosis. The prior art method used to isolate and identify H.  
 CC capsulatum is expensive and requires several weeks to complete. The  
 CC expense is increased by the number of samples required. If not enough  
 CC sample are collected, small but highly contaminated areas can be  
 CC overlooked. A need exists for a specific, sensitive, and rapid assay for  
 CC H. capsulatum. The present invention provides this need, as it is rapid,  
 CC sensitive and inexpensive. This sequence represents PCR primer HC1 which  
 CC is used in the method of detection. (Updated on 15-SEP-2003 to  
 CC standardise OS field)  
 XX  
 SQ Sequence 18 BP; 3 A; 8 C; 5 G; 2 T; 0 U; 0 Other;  
 Query Match 3.3%; Score 14.8; DB 1; Length 18;  
 Best Local Similarity 88.9%; Pred. No. 3e+02; Mismatches 0; Indels 0; Gaps 0;  
 Matches 16; Conservative 0;  
 OY 410 CTGAGCTGTGGGACGTGC 427  
 DB 18 CTGACCGGTGGGACGTGC 1  
 RESULT 318  
 AAQ23265  
 ID AAQ23265 standard; DNA; 18 BP.  
 XX  
 AC AAQ23265;  
 XX  
 DT 23-JUL-1992 (first entry)  
 XX  
 DE Japanese type C hepatitis virus partial gene.  
 XX  
 KW HCV; probe; diagnostic; ss.  
 XX  
 OS Hepatitis C virus.  
 XX  
 PN JP04045790-A.  
 XX  
 PD 14-FEB-1992.  
 XX  
 PF 13-JUN-1990; 90JP-00154204.  
 XX  
 PR 13-JUN-1990; 90JP-00154204.  
 XX  
 FA (TOKU ) TOKUYAMA SODA KK.

XX WPI; 1992-101941/13.  
 XX Poly:nucleotide for hepatitis virus gene detection - using  
 PT poly:nucleotide deoxyribonucleic acid probe, hybridising with hepatitis  
 PT virus gene and detecting hybrid for diagnosis.  
 XX  
 PS Disclosure; Page 2; 14pp; Japanese.  
 XX  
 CC The polynucleotide contains the partial base sequence of the Japanese  
 CC type C hepatitis virus (HCV) gene. The DNA was obtd. from the serum of a  
 CC non A non B hepatitis patient. The serum was ultracentrifuged and the  
 CC ppte. dissolved in a mixture of GITC, Na citrate, sarcosine and  
 CC mercaptoethanol. Phenol chloroform was added and the mixture centrifuged.  
 CC Isopropanol was added to the aq. layer which was left to stand at -20 deg  
 CC C for 3 hrs. then centrifuged. The ppte. was treated by GITC and  
 CC phenolchloroform and pptd. by ethanol and dissolved in dH2O to give an  
 CC aq. DNA soln. The gene was amplified by PCR and the HCV gene cloned for  
 CC determination of its base sequence. A genomic version of the sequence was  
 CC given (AAQ23036). In the version shown there is a Y at base 189. The DNA  
 CC in the specification has a guanine at this position. The DNA may be used  
 CC as a probe for detection of Japanese type C hepatitis. See also AAQ23264  
 XX  
 XX Sequence 18 BP; 1 A; 10 C; 5 G; 0 T; 0 U; 2 Other;  
 SQ Query Match 3.2%; Score 14.6; DB 1; Length 18;  
 Best Local Similarity 82.4%; Pred. No. 3.1e+02;  
 Matches 14; Conservative 2; Mismatches 1; Indels 0; Gaps 0;  
 QY 196 CGCCCTCCCGGGACC 212  
 :||||| |:  
 Db 2 YGCCCCCCYGGGGACC 18  
 RESULT 319  
 ADD00949  
 ID ADD00949 standard; DNA; 16 BP.  
 XX  
 AC ADD00949;  
 XX  
 DT 01-JAN-2004 (first entry)  
 XX  
 DE Human Jagged 2 forward PCR primer SEQ ID NO:4.  
 XX  
 XX apoptosis; Jagged 2 inhibitor; cytostatic; hyperproliferative disorder;  
 KW human; ss; PCR primer.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN WO2003077848-A2.  
 XX  
 PD 25-SEP-2003.  
 XX  
 XX 10-MAR-2003; 2003WO-US007340.  
 XX  
 XX 12-MAR-2002; 2002US-00096399.  
 XX  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX  
 XX Koller E, Shapard PJ;  
 XX  
 XX WPI; 2003-756943/71.  
 XX  
 PT Inducing apoptosis in a cell or animal for treating a subject having a  
 PT condition associated with insufficient apoptosis by administering to a  
 PT cell or animal a Jagged 2 inhibitor to reduce Jagged 2 levels or  
 PT activity.  
 XX  
 XX Example 13; SEQ ID NO 4; 148pp; English.  
 PS  
 XX The present invention describes a method for inducing apoptosis in a cell  
 CC or animal comprising administering to a cell or animal a Jagged 2

CC inhibitor to reduce Jagged 2 levels or activity. Also described: (1)  
 CC treating a subject having a disease or condition associated with  
 CC insufficient apoptosis by administration of a Jagged 2 inhibitor; (2) a  
 CC pharmaceutical composition comprising a Jagged 2 inhibitor and another  
 CC active ingredient for inducing apoptosis; and (3) a kit comprising a  
 CC Jagged 2 inhibitor and instructions for using the Jagged 2 inhibitor in  
 CC the induction of apoptosis. The Jagged 2 inhibitor has cytostatic  
 CC activity. The method can be used for inducing apoptosis in a cell or  
 CC animal for treating a subject having a disease or condition associated  
 CC with insufficient apoptosis, e.g., hyperproliferative disorder. The  
 CC present sequence represents a PCR primer for human Jagged 2, which is  
 CC used in an example from the present invention.  
 XX  
 XX Sequence 16 BP; 1 A; 7 C; 5 G; 3 T; 0 U; 0 Other;  
 SQ Query Match 3.2%; Score 14.4; DB 1; Length 16;  
 Best Local Similarity 93.8%; Pred. No. 2.8e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 265 CCCGGGGCTTCGCG 280  
 ||| ||||| |||||  
 Db 1 CCCAGGGCTTCGCG 16  
 RESULT 320  
 ADH62909  
 ID ADH62909 standard; DNA; 16 BP.  
 XX  
 AC ADH62909;  
 XX  
 DT 25-MAR-2004 (first entry)  
 XX  
 DE Human Jagged 2 DNA specific forward PCR primer.  
 XX  
 XX Antisense; Jagged 2; hyperproliferative disorder; cancer;  
 KW developmental disorder; apoptosis; prophylaxis; antisense therapy; human;  
 KW primer; PCR; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN US2003170636-A1.  
 XX  
 PD 11-SEP-2003.  
 XX  
 XX 05-MAR-2002; 2002US-00091625.  
 XX  
 XX 05-MAR-2002; 2002US-00091625.  
 PR  
 XX (ISIS-) ISIS PHARM INC.  
 PA  
 XX  
 XX Freier SM;  
 XX  
 XX WPI; 2003-898250/82.  
 DR  
 XX  
 XX New antisense oligonucleotides for modulating Jagged 2 expression, useful  
 PT for diagnosing, preventing or treating diseases or conditions associated  
 PT with Jagged 2, e.g. cancer or developmental disorders.  
 XX  
 XX Example 13; SEQ ID NO 4; 63pp; English.  
 PS  
 XX The invention relates to novel antisense compounds targetted to a nucleic  
 CC acid molecule encoding Jagged 2 to inhibit its expression. Antisense  
 CC compounds of the invention are useful for treating an animal having a  
 CC disease or condition associated with Jagged 2 e.g. hyperproliferative  
 CC disorder (particularly cancer), a developmental disorder or a disease or  
 CC condition that arises from aberrant apoptosis. They are also used for  
 CC diagnostics, prophylaxis or as research reagents or kits. The invention  
 CC is also useful in antisense therapy. The present sequence is human Jagged  
 CC 2 DNA specific PCR primer. This sequence is used in the exemplification  
 CC of the invention.  
 XX  
 XX Sequence 16 BP; 1 A; 7 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 3.2%; Score 14.4; DB 1; Length 16;  
 Best Local Similarity 93.8%; Pred. NO. 2.8e+02;  
 Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 265 CCCGGGCTTCTCCGG 280  
 ||| ||||| |||||  
 Db 1 CCCAGGGCTTCTCCGG 16

## RESULT 321

ADH57064  
 ID ADH57064 standard; DNA; 16 BP.

AC ADH57064;

DT 25-MAR-2004 (first entry)

DE PCR primer used to amplify human Jagged 2 DNA SeqID 4.

KW human; Jagged 2; differentiation; cell fate; signalling;  
 KW Usher syndrome type 1a; retinitis pigmentosa; PCR; ss; primer.

XX Homo sapiens.

OS

XX US2003207839-A1.

XX

PN 06-NOV-2003.

XX

PD

XX

PF 13-JUN-2003; 2003US-00461668.

XX

PR 05-MAR-2002; 2002US-00091625.

XX

PA (FREI/) FREIER S M.

XX

PI Freier SM;

XX

XX WPI; 2003-864795/80.

DR

XX

XX

PT New antisense oligonucleotides of 8-40 nucleobases, useful for modulating

PT the function of nucleic acid molecules encoding Jagged 2, ultimately

PT modulating the amount of Jagged 2 produced.

XX

PS Example 13; SEQ ID NO 4; 63pp; English.

XX

CC This invention relates to novel antisense compounds that can be used to

CC modulate the expression of Jagged 2. Specifically, it refers to

CC compositions useful for inhibiting the expression of Jagged 2, a human

CC homologue of the Drosophila Serrate gene, which is involved in

CC differentiation and cell fate, as well as positive feedback control over

CC signalling genes such as Notch 1, Notch 3 and Jagged 1. The Jagged 2 gene

CC is located on chromosome 14q32, a region that has been implicated in

CC genetic diseases including Usher syndrome type 1a that is associated with

CC retinitis pigmentosa. The present invention describes antisense

CC oligonucleotides that comprise at least one modified sugar moiety, a 2'-O

CC methylethyl (2' MOE) and at least one modified nucleobase, a 5-

CC methylcytosine. These compounds are useful for modulating the function of

CC nucleic acid molecules encoding Jagged 2, ultimately modulating the

CC amount of Jagged 2 produced, which in turn is useful for research

CC reagents and in diagnostics. This oligonucleotide sequence is a PCR

CC primer used to amplify human Jagged 2 DNA of the invention.

XX

XX Sequence 16 BP; 1 A; 7 C; 5 G; 3 T; 0 U; 0 Other;

SO

Query Match 3.2%; Score 14.4; DB 1; Length 16;

Best Local Similarity 93.8%; Pred. NO. 2.8e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 265 CCCGGGCTTCTCCGG 280  
 ||| ||||| |||||  
 Db 1 CCCAGGGCTTCTCCGG 16

## RESULT 322

ACA06327

ID ACA06327 standard; RNA; 17 BP.

XX

AC ACA06327;

XX

DT 03-JUN-2003 (first entry)

XX

DE NFKB sub-unit modulating inozyme substrate #146.

XX

XX Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;

KW G-cleaver; amberyzyme; cancer; REL-A activity; breast cancer; human;

KW lung cancer; prostate cancer; colorectal cancer; brain cancer;

KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;

KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;

KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;

KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;

KW cyclophosphamide; doxorubicin; fluorouracil carboplatin; edatrexate;

KW gencitabine; radiation therapy; inflammatory disease; asthma; diabetes;

KW rheumatoid arthritis; restenosis; Crohn's disease; obesity;

KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;

KW transplant/graft rejection; reperfusion injury; glomerulonephritis;

KW allergic airway inflammation; inflammatory bowel disease; infection; ss.

XX Homo sapiens.

OS

XX US2002177568-A1.

XX

PN 28-NOV-2002.

XX

PD

XX

PF 23-MAY-2001; 2001US-00864785.

XX

PR 07-DEC-1992; 92US-00987132.

XX

PR 18-MAY-1994; 94US-00245466.

XX

PR 15-AUG-1994; 94US-00291932.

XX

PR 23-DEC-1996; 96US-00777916.

XX

XX (STIN/) STINCHCOMB D T.

PA

PA (MCSW/) MCSWIGGEN J.

XX

PA (DRAP/) DRAPER K G.

XX

XX Stinchcomb DT, Mcswiggen J, Draper KG;

PI

XX WPI; 2003-340953/32.

DR

XX

XX

PT Novel enzymatic nucleic acid molecules which down regulates expression of

PT a sequence encoding a subunit of nuclear factor kappa B useful for

PT treating cancer, inflammatory disorders and autoimmune diseases.

XX

PS Claim 3; Page 29; 72pp; English.

XX

CC The invention describes an enzymatic nucleic acid molecule (I) which down

CC regulates expression of a sequence encoding a subunit of nuclear factor

CC kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberyzyme

CC configuration. The enzymatic nucleic acid molecule is adapted to treat

CC cancer and is useful for down-regulating REL-A activity in a cell, for

CC treating a patient having a condition associated with the level of REL-A.

CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in

CC the presence of a divalent cation, especially Mg<sup>2+</sup>. The enzymatic and

CC antisense nucleic acid molecules are useful for treating breast, lung,

CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,

CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or

CC multidrug resistant cancer. The method involves use of other drug

CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or

CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,

CC cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,

CC gencitabine or radiation therapy. The enzymatic and antisense nucleic

CC acid molecules are also useful for treating inflammatory disease such as

CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,

CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft

CC rejection, gene therapy applications, ischaemia/reperfusion injury

CC (central nervous system (CNS) and myocardial), glomerulonephritis,

CC sepsis, allergic airway inflammation, inflammatory bowel disease or

CC infection. This sequence represents the substrate of a novel enzymatic

CC	prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC	carcival, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
CC	multidrug resistant cancer. The method involves use of other drug
CC	therapies such as monoclonal antibodies, KLU-A-specific inhibitors or
CC	chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC	cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,
CC	gemtamine or radiation therapy. The enzymatic and antisense nucleic
CC	acid molecules are also useful for treating inflammatory disease such as
CC	rheumatoid arthritis, stenosis, asthma, Crohn's disease, diabetes,
CC	obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
CC	rejection, gene therapy applications, ischaemia/reperfusion injury
CC	(central nervous system (CNS) and myocardial), glomerulonephritis,
CC	sepsis, allergic airway inflammation, inflammatory bowel disease or
CC	infection. This sequence represents the substrate of a novel enzymatic
CC	nucleic acid molecule
XX	
XX	Sequence 17 BP; 0 A; 11 C; 3 G; 0 T; 3 U; 0 Other;
XX	
XX	Query Match 3.2%; Score 14.4; DB 1; Length 17;
XX	Best Local Similarity 75.0%; Pred. No. 3e+02;
XX	Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
QY	131 CCTCGCGCTGCCGCT 146
	:     :
DB	2 CCUCCGCGCGCGCCU 17
RESULT 324	
ID183554	
ID	AD183554 standard; RNA; 17 BP.
XX	
AC	AD183554;
XX	
DT	03-JUN-2004 (first entry)
XX	
DE	HCV DNazyme substrate sequence #800.
XX	
XX	ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;
KW	HCV infection; type I interferon; DNazyme.
XX	
OS	Hepatitis C virus.
XX	
XX	US2003125270-A1.
PN	
XX	03-JUL-2003.
PD	
XX	18-DEC-2000; 2000US-00740332.
PF	
XX	18-DEC-2000; 2000US-00740332.
PR	
XX	(BLAT/) BLATT L.
PA	(MCSW/) MCSWIGGEN J.
PA	(ROBE/) ROBERTS E.
PA	(PAVC/) PAVCO P A.
PA	(MACE/) MACEJACK D.
XX	
PI	Blatt L, Mcswiggen J, Roberts E, Pavco PA, Macejack D;
XX	
DR	WPI; 2004-031273/03.
XX	
PT	Enzymatic nucleic acid molecules which specifically cleave RNA derived
PT	from hepatitis C virus (HCV), useful for the treatment of HCV infections,
PT	especially in combination with type I interferon therapy.
XX	
PS	Claim 1; SEQ ID NO 800; 198pp; English.
XX	
CC	The invention relates to an enzymatic nucleic acid molecule which
CC	specifically cleaves RNA derived from hepatitis C virus (HCV), in which
CC	the binding arms of the enzymatic nucleic acid molecule comprises
CC	sequences complementary to any of the defined substrate sequences given
CC	in the specification. The nucleic acid molecule may be administered for
CC	the treatment of HCV infections, especially in combination with type I
CC	interferons. The present sequence represents a HCV DNazyme substrate

```

CC sequence.
SQ Sequence 17 BP; 5 A; 6 C; 4 G; 0 T; 1 U; 1 Other;

Query Match          3.2%; Score 14.4; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 3e+02;
Matches 14; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 432 AGGACTCGGCTCACACA 448
Db 1 AGGACUNGCCCCACACA 17

RESULT 325
AAA63120
ID AAA63120 standard; DNA; 18 BP.
XX
AC AAA63120;
XX
DT 07-DEC-2000 (first entry)
XX
DE Antisense oligonucleotide for use in RNase H mapping assay SEQ ID NO: 24.
XX
KW Immunoregulator; antisense oligonucleotide; cancer; tumour cell vaccine;
KW rheumatoid arthritis; autoimmune disease; diabetes mellitus; thyroiditis;
KW ss.
XX
OS Mus sp.
XX
PN WO200034467-A1.
XX
PD 15-JUN-2000.
XX
PF 24-NOV-1999; 99WO-US028096.
XX
PR 04-DEC-1998; 98US-00205995.
XX
PA (ANTI-) ANTIGEN EXPRESS INC.
XX
PI Xu M, Qiu G, Humphreys R;
XX
WPI; 2000-423417/36.
XX
DR Cancer cell vaccine for treating malignancies, autoimmune disorders and
PT isolating autodeterminant peptides comprises a regulator of invariant
PT chain protein expression or immunoregulatory function.
XX
PS Example 1; Page 46; 94pp; English.
XX
CC The present sequence is an antisense oligonucleotide which was used in an
CC RNase mapping experiment. This enables the identification of sites within
CC the II RNA strand which hybridise to antisense DNA. These sites can then
CC be used as targets for antisense strands which may, using gene therapy,
CC be used as tumour cell vaccines (for example to treat carcinomas,
CC melanoma, leukaemia, lymphomas, stomach, breast, colon or rectum, lung,
CC prostate, bladder, pancreas, brain and ovarian cancers), or they can be
CC used to treat autoimmune diseases including rheumatoid arthritis,
CC diabetes mellitus and thyroiditis
XX
SQ Sequence 18 BP; 3 A; 7 C; 6 G; 2 T; 0 U; 0 Other;

Query Match          3.2%; Score 14.4; DB 1; Length 18;
Best Local Similarity 93.8%; Pred. No. 3.2e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 220 GGTGCGCTGCCAGCC 235
Db 1 GGTGCGCTGCCAGCC 16

RESULT 326
AAD47637/C
ID AAD47637 standard; DNA; 19 BP.

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---

```

XX AAD47637;
AC
XX 24-FEB-2003 (first entry)
DT
XX Forward primer, to construct human Ksgamma2h antibody expression vector.
DE
XX Immunoglobulin; Ig; antibody; immunocytokine; immunofusion; immunoligand;
KW protease resistance; PCR; primer; ss.
XX
XX Unidentified.
OS
XX WO200272605-A2.
XX
PN 19-SEP-2002.
XX
PD 07-MAR-2002; 2002WO-US007011.
XX
PF 07-MAR-2001; 2001US-0274096P.
XX
PR (LEXI-) LEXIGEN PHARM CORP.
XX
PA Gallies SD, Way J;
XX
PI WPI; 2003-018726/01.
XX
DR
XX
PT New fusion protein, useful for producing antibodies, immunocytokines or
PT Fc fusion proteins that enhance the expression or protease resistance of
PT a fusion protein, comprises an immunoglobulin (Ig) moiety fused to a non-
PT Ig moiety.
XX
PS Example 5; Page 63; 71pp; English.
XX
CC The present invention relates to methods and compositions for efficiently
CC expressing antibody fusion proteins. The invention also relates to novel
CC fusion proteins comprising an immunoglobulin (Ig) moiety fused to a non-
CC immunoglobulin moiety where the immunoglobulin moiety comprises a first
CC domain from a first antibody isotype and a second domain from a second
CC antibody isotype. The antibodies or Ig fusion proteins are useful to
CC produce intact antibodies, immunocytokines, immunofusions, immunoligands
CC and other antibody and Fc fusion proteins that enhance the expression,
CC proper oligomerisation, purification and protease resistance of desired
CC fusion proteins, optionally with modified, combined or decreased Fc
CC effector functions. The present sequence is a PCR primer which is used to
CC construct human Ksgamma2h antibody expression vector. This sequence is
CC used in the exemplification of the invention
XX
SQ Sequence 19 BP; 5 A; 7 C; 3 G; 4 T; 0 U; 0 Other;

Query Match          3.2%; Score 14.4; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 3.4e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 300 GAAGAGTTGGGCTCTG 315
Db 19 GAAGATTGGGCTCTG 4

RESULT 327
AAF57369/C
ID AAF57369 standard; DNA; 17 BP.
XX
AC AAF57369;
XX
DT 11-JUN-2001 (first entry)
XX
DE Murine Cdc25A intron 7/exon 8 splice junction sequence.
XX
KW Cdc25; Cdc25 phosphatase; transcription; modulator; murine; Cdc25A; exon;
KW intron; ds.
XX
OS Mus sp.
XX

```

PN WO200120034-A2.  
XX 22-MAR-2001.  
PD  
XX 11-SEP-2000; 2000WO-US024838.  
PF  
XX 13-SEP-1999; 99US-0153639P.  
PR  
XX (BADI ) BASF AG.  
PA  
XX Voss J, Timm J;  
PI  
XX WPI; 2001-244825/25.  
DR  
XX Assay for screening modulators of Cdc25 activity by using a cell having a  
PT recombinant Cdc25 phosphatase gene whose expression alters the  
PT transcription of a selected gene in the presence of a modulator.  
XX  
XX Example 1; Page 15; 55pp; English.  
PS  
XX The invention relates to a method of identifying a modulator of Cdc25  
CC activity that comprises contacting a test cell having a recombinant Cdc25  
CC phosphatase gene whose expression alters transcription of a selected  
CC gene, with a compound under conditions where recombinant Cdc25  
CC phosphatase gene is expressed and alters the transcription of a selected  
CC gene as an indication of the compound being a modulator of Cdc25-mediated  
CC transcription. The method is useful for identifying modulators of Cdc25  
CC activity. Sequences AAP57363-376 represent intron/exon splice junction  
CC sequences of the murine Cdc25A gene  
XX  
XX Sequence 17 BP; 4 A; 3 C; 4 G; 6 T; 0 U; 0 Other;  
SQ  
Query Match 3.1%; Score 14; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 155 TCATTCTAGAGCAA 168  
DB 15 TCATTCTAGAGCAA 2  
RESULT 328  
AAC91135  
ID AAC91135 standard; DNA; 17 BP.  
AC AAC91135;  
XX  
XX 20-MAR-2001 (first entry)  
DT  
XX Fungal pathogenic species identification probe #21.  
DE  
XX Fungal pathogenic; Internal Transcribed Spacer; ITS;  
KW opportunistic infection; ss.  
KW  
XX Unidentified.  
OS  
XX WO200073499-A2.  
PN  
XX 07-DEC-2000.  
PD  
XX 24-MAY-2000; 2000WO-EP004714.  
PF  
XX 28-MAY-1999; 99EP-00870109.  
PR  
XX 11-JUN-1999; 99US-0138621P.  
PR  
XX (INNO-) INNOGENETICS NV.  
FA (IRBI-) ENTERPRISE IRELAND T/A BIORESEARCH IRELA.  
PA  
XX Smith T, Maher M, Martin C, Jannes G, Rosseau R, Van Der Weide M;  
PI  
XX WPI; 2001-061555/07.  
DR  
XX Detecting and identifying fungal pathogens, especially Candida,  
XX

PT Cryptococcus and Aspergillus, comprises hybridizing the amplified nucleic  
PT acid of the fungal pathogen with a probe from the internal transcribed  
PT spacer region of a DNA.  
XX  
XX Claim 1; Page 46; 59pp; English.  
PS  
XX The present invention relates to detecting and identifying fungal  
CC pathogenic species in a sample. The method involves hybridizing a nucleic  
CC acid of a fungal pathogen possibly present in the sample with at least  
CC one oligonucleotide probe, from an Internal Transcribed Spacer (ITS)  
CC region. The method is useful for simultaneous detection and  
CC differentiation of clinically important fungi in a single assay,  
CC particularly Candida albicans, C. parapsilosis, C. tropicalis, C. kefyr,  
CC C. krusei, C. glabrata, C. dubliniensis, Aspergillus flavus, A.  
CC versicolor, A. nidulans, A. fumigatus, C. neoformans and pneumocystis  
CC carinii. The method is especially useful in the detection of  
CC opportunistic infections in patients with impaired immunity systems, such  
CC as organ transplant patients, patients receiving intensive anticancer  
CC treatments, diabetics or AIDS patients  
XX  
XX Sequence 17 BP; 1 A; 7 C; 7 G; 2 T; 0 U; 0 Other;  
SQ  
Query Match 3.1%; Score 14; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 3.3e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 328 CTCTCGGGGGCGAG 341  
DB 2 CTCTCGGGGGCGAG 15  
RESULT 329  
AAV81598  
ID AAV81598 standard; DNA; 17 BP.  
XX  
XX AAV81598;  
AC  
XX 11-MAY-1999 (first entry)  
DT  
XX Oligonucleotide used in PNA-DNA-PNA chimeric macromolecule.  
DE  
XX PNA; peptide nucleic acid; nuclease resistance; diagnostic; ss.  
KW  
XX Synthetic.  
OS  
XX WO9514706-A1.  
PN  
XX 01-JUN-1995.  
PD  
XX 23-NOV-1994; 94WO-US013523.  
PF  
XX 24-NOV-1993; 93US-00158352.  
PR  
XX (ISIS-) ISIS PHARM INC.  
PA  
XX Cook PD;  
PI  
XX WPI; 1995-206893/27.  
DR  
XX New chimeric macromolecules contg. DNA and peptide nucleic acid segments  
XX - with good nuclease stability and binding affinity, also activating  
PT RNaseH, useful for treating disease, in diagnosis and for identifying  
PT chemotherapeutic agents.  
PT  
XX Disclosure; Page 50; 68pp; English.  
PS  
XX The patent discloses new macromolecules of formula PNA-DNA-PNA, in which  
CC DNA comprises at least one 2'-deoxynucleotide and each PNA comprises at  
CC least one peptide nucleic acid subunit. These compounds have increased  
CC resistance to nuclease and increased specific binding affinity, and they  
CC can activate RNaseH for target strand cleavage. They can hybridise  
CC specifically to a nucleic acid strand (especially RNA) and are useful (1)  
CC for treating diseases associated with undesirable production of protein,  
CC



CC (2) for in-vitro modification of sequence-specific nucleic acid (by  
CC contacting a test solution with the macromolecule and RNaseH), or (3) for  
CC in-vivo enhancement of polynucleotide hybridisation and RNase activity.  
CC They can also be used diagnostically and for screening chemotherapeutic  
CC agents

XX SQ Sequence 17 BP; 2 A; 5 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 3.1%; Score 13.8; DB 1; Length 17;

Best Local Similarity 88.2%; Pred. No. 3.4e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 102 TTCTCGTGTACTTCAG 118

Db 1 TTCTCGTGTACTTCAG 17

RESULT 330

AA62951

ID AAX62951 standard; RNA; 17 BP.

XX AC AAX62951;

DT 16-JUL-1999 (first entry)

XX DE Delta-9 desaturase hammerhead ribozyme target SEQ ID NO:826.

XX KW Maize; corn; Zea mays; delta-9 desaturase; GBSS; target; substrate;  
KW granule bound starch synthase; hammerhead ribozyme; hairpin ribozyme;  
KW modulation; gene expression; transgenic plant; cleavage; canola plant;  
KW caffeine synthesis; coffee plant; nicotine production; tobacco;  
KW fruit ripening; flower pigmentation; lignin production; ss.

XX OS Zea mays.

XX PN WO9710328-A2.

XX PD 20-MAR-1997.

XX PF 12-JUL-1996; 96WO-US011689.

XX PR 13-JUL-1995; 95US-0001135P.

XX PA (RIBO-) RIBOZYME PHARM INC.

XX PA (DOWC) DOWELANCO.

XX FI Zwick MG, Edington BE, Mcswiggen JA, Merlo PAO, Guo L, Skokut TA;  
XX PI Young SA, Folkerts O, Merlo DJ;

XX DR WPI; 1997-202224/18.

XX PT Ribozyme which modulates plant gene expression - preferably modulates  
PT expression of DELTA-9 desaturase or granule bound starch synthase in  
PT maize or canola.

XX PS Claim 38; Page 86; 155pp; English.

XX CC The present invention describes an enzymatic nucleic acid molecule (I)  
CC with RNA cleaving activity, which modulates the expression of a plant  
CC gene. Also described is a gene comprising a cDNA sequence encoding maize  
CC Delta-9 desaturase. (I) can be used to modulate expression of a gene,  
CC preferably Delta-9 desaturase or a granule bound starch synthase (GBSS)  
CC gene, in a plant (preferably a maize or canola plant). (I) can be used to  
CC modulate caffeine synthesis in a coffee plant, nicotine production in a  
CC tobacco plant, fruit ripening processes in an apple, tomato, pear, plum  
CC or peach plant, flower pigmentation in a rose, petunia, chrysanthemum or  
CC marigold plant or lignin production in a tobacco, aspen, poplar or pine  
CC plant

XX SQ Sequence 17 BP; 1 A; 6 C; 5 G; 0 T; 5 U; 0 Other;

Query Match 3.1%; Score 13.8; DB 1; Length 17;

Best Local Similarity 64.7%; Pred. No. 3.4e+02;

Matches 11; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

Qy 106 CGCTGACTTTCAGCGG 122

Db 1 CGCUGCCUUCAGCUGG 17

RESULT 331

ABL46697/C

ID ABL46697 standard; RNA; 17 BP.

XX AC ABL46697;

DT 27-JUN-2003 (first entry)

XX DE Human GRID NCH ribozyme substrate oligonucleotide #151.

XX KW Human; Grb2-related with Insert Domain; GRID; T-cell;  
KW co-stimulatory adaptor protein; tissue rejection; graft rejection;  
KW leukaemia; cytostatic; ss.

XX OS Homo sapiens.

XX PN WO200162911-A2.

XX PD 30-AUG-2001.

XX PF 23-FEB-2001; 2001WO-US005957.

XX PR 24-FEB-2000; 2000US-0184594P.

XX PA (RIBO-) RIBOZYME PHARM INC.

XX PA (GLAX) GLAXO GROUP LTD.

XX PI Jarvis T, Von Carlowitz I, Mcswiggen JA, Hamblin PA, Ellis JH;

XX DR WPI; 2001-550088/61.

XX PT New nucleic acid(s) for regulating the Grb2-related with Insert Domain  
PT (GRID) gene comprises using antisense and enzymatic nucleic acid  
PT molecules such as hammerhead ribozymes.

XX PS Claim 4; Page 65; 108pp; English.

XX CC The present invention relates to oligonucleotides that downregulate the  
XX expression of human Grb2-related with Insert Domain (GRID) gene. GRID is  
XX a T-cell co-stimulatory adaptor protein. The oligonucleotides are useful  
XX for modulating the expression of GRID, to treat conditions such as  
XX tissue/graft rejection and leukaemia. The oligonucleotides can also be  
XX administered in conjunction with other therapies such as radiation,  
XX chemotherapy and cyclosporin treatment. The present oligonucleotide was  
XX used to illustrate the invention

XX SQ Sequence 17 BP; 3 A; 4 C; 9 G; 0 T; 1 U; 0 Other;

Query Match 3.1%; Score 13.8; DB 1; Length 17;

Best Local Similarity 88.2%; Pred. No. 3.4e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 200 CCTCCCGGGGACCTCCG 216

Db 17 CCTCCCTGGGACCTCCG 1

RESULT 332

ABL46496/C

ID ABL46496 standard; RNA; 17 BP.

XX AC ABL46496;

DT 27-JUN-2003 (first entry)

XX DE Human GRID hammerhead ribozyme substrate oligonucleotide #129.

XX Human; Grb2-related with Insert Domain; GRID; T-cell;  
KW co-stimulatory adaptor protein; tissue rejection; graft rejection;  
KW leukaemia; cytostatic; ss.  
XX Homo sapiens.  
XX WO200162911-A2.  
XX 30-AUG-2001.  
XX 23-FEB-2001; 2001WO-US005957.  
XX 24-FEB-2000; 2000US-0184594P.  
XX (RIBO-) RIBOZYME PHARM INC.  
PA (GLAX ) GLAXO GROUP LTD.  
XX Jarvis T, Von Carlowitz I, Mcswiggen JA, Hamblin PA, Ellis JH;  
XX WPI; 2001-550088/61.  
XX New nucleic acid(s) for regulating the Grb2-related with Insert Domain  
PT (GRID) gene comprises using antisense and enzymatic nucleic acid  
PT molecules such as hammerhead ribozymes.  
XX Claim 4; Page 61; 108pp; English.  
XX The present invention relates to oligonucleotides that downregulate the  
CC expression of human Grb2-related with Insert Domain (GRID) gene. GRID is  
CC a T-cell co-stimulatory adaptor protein. The oligonucleotides are useful  
CC for modulating the expression of GRID, to treat conditions such as  
CC tissue/graft rejection and leukaemia. The oligonucleotides can also be  
CC administered in conjunction with other therapies such as radiation,  
CC chemotherapy and cyclosporin treatment. The present oligonucleotide was  
CC used to illustrate the invention  
XX  
SQ Sequence 17 BP; 3 A; 5 C; 8 G; 0 T; 1 U; 0 Other;  
Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.4e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
OY 201 CTCCTGGGGACCTGCGG 217  
Db 17 CTCCTGGGGACCTGCGG 1  
RESULT 333  
ABK19302/c  
ID ABK19302 standard; RNA; 17 BP.  
XX ABK19302;  
XX  
XX 09-APR-2002 (first entry)  
XX Human ERG Amberzyme target sequence Seq ID No 1949.  
DE  
DE Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;  
KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;  
KW vulnary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;  
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;  
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;  
KW angiofibroma of tuberosus sclerosis; port-wine stain; wound healing;  
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
KW Osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNAzyme; inozyme;  
KW amberzyme.  
XX Homo sapiens.  
XX WO200188124-A2.  
XX  
XX 22-NOV-2001.

XX 16-MAY-2001; 2001WO-US015866.  
XX 16-MAY-2000; 2000US-00572021.  
XX (RIBO-) RIBOZYME PHARM INC.  
PA (GLAX ) GLAXO GROUP LTD.  
XX Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;  
PI WPI; 2002-082995/11.  
XX Novel polynucleotide which down regulates expression of Ets-related gene,  
PT useful for treating cancer, diabetic retinopathy, macular degeneration,  
PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.  
XX Claim 4; Page 125; 149pp; English.  
XX The invention relates to a nucleic acid molecule (I) which down regulates  
CC expression of an Ets-related gene (ERG). (I) is useful for treating  
CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
CC tumour angiogenesis, diabetic retinopathy, macular degeneration,  
CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
CC vulgaris, angiofibroma of tuberosus sclerosis, port-wine stains, Sturge  
CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu  
CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
CC treating a patient having a condition associated with the level of ERG,  
CC by contacting cells of the patient with (I) under conditions suitable for  
CC the treatment. The method comprises the use of one or more therapies  
CC under conditions suitable for the treatment. Leukaemia or tumour  
CC angiogenesis is treated by administering (I) to the patient in  
CC conjunction with one or more of other therapies such as radiation or  
CC chemotherapy treatment. (I) is useful for reducing ERG activity in a  
CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
CC ERG gene, by contacting (I) with RNA, in the presence of a divalent  
CC cation such as Mg<sup>2+</sup>. (I) is useful for diagnosis of conditions and  
CC diseases related to the expression of ERG, and as diagnostic tool to  
CC examine genetic drift and mutations within diseased cells or to detect  
CC the presence of ERG RNA in a cell. (I) is useful for specifically  
CC targeting genes that share homology with ERG gene or ERG fusion genes.  
CC ABK17354-ABK22719 represent nucleic acids, including antisense and  
CC enzymatic nucleic acid molecules which regulate expression of ERG, and  
CC related PCR primers of the invention  
XX  
SQ Sequence 17 BP; 1 A; 5 C; 6 G; 0 T; 5 U; 0 Other;  
Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.4e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
OY 124 GGAAAAGCCTCGGCTG 140  
Db 17 GGAAAAGCCTCGGCAG 1  
RESULT 334  
ADA99825  
ID ADA99825 standard; DNA; 17 BP.  
XX ADA99825;  
XX  
XX 20-NOV-2003 (first entry)  
XX Human MD23 scanning oligonucleotide SRQ ID 814.  
DE  
DE Cytostatic; immunostimulant; gene therapy; vaccine; human;  
KW zinc finger protein; MD23; MD24; MD27; MDZ12; chromosome 7q22.1;  
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;  
KW developmental disorder; ss.  
XX Homo sapiens.  
XX  
XX EP1281758-A2.  
PN

```

XX PD 05-FEB-2003.
XX XX
XX PF 30-JUL-2002; 2002EP-00016874.
XX XX
XX PR 02-AUG-2001; 2001US-00922181.
XX XX
XX PA (AEOM-) ABOMICA INC.
XX XX
XX PI Shannon M, Gu Y, Nguyen C;
XX XX
XX DR WPI; 2003-423107/40.
XX XX
XX PT New zinc finger-containing proteins and nucleic acids, useful in
XX PT manufacturing a medicament for treating or preventing a disorder
XX PT associated with decreased or increased expression or activity of MD23,
XX PT MD24, MD27 or MD212, e.g. cancer.
XX XX
XX PS Example 8; SEQ ID NO 814; 103pp; English.
XX XX
XX CC The present invention relates to novel human zinc finger-containing
XX CC proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is
XX CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
XX CC MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
XX CC 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
XX CC or in manufacturing a medicament for treating or preventing a disorder
XX CC associated with decreased or increased expression or activity of MD23,
XX CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
XX CC acids and proteins are also useful for diagnosing or monitoring a disease
XX CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
XX CC acids can also be used as probes to detect and characterize gross
XX CC alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are
XX CC useful in constructing microarrays for measuring gene expression. The
XX CC proteins are useful as therapeutic agents for gene therapy or as
XX CC vaccines. The present sequence was used to illustrate the invention.
XX XX
XX SQ Sequence 17 BP; 2 A; 2 C; 8 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 3.1%; Score 13.8; DB 1; Length 17;
XX Best Local Similarity 88.2%; Pred. No. 3.4e+02;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
Oy 24 AGGGGTGGTGCCATT 40
Db ||||| |||||
1 AGGGGTGGTGCCATT 17

RESULT 335
ACD58382
ID ACD58382 standard; RNA; 17 BP.
XX
XX AC ACD58382;
XX
XX DT 24-SEP-2003 (first entry)
XX
XX DE HCV DNazyme substrate sequence #800.
XX
XX KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
XX KW RNA stability; RNA expression; RNA synthesis; antisense;
XX KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
XX KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
XX KW HBV reverse transcriptase; Enhancer I region; viral replication;
XX KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
XX KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
XX KW virucide; antiinflammatory; substrate; ss.
XX
XX OS Hepatitis C virus.
XX
XX PN WO200281494-A1.
XX
XX PD 17-OCT-2002.
XX
XX PF 26-MAR-2002; 2002WO-US009187.
XX
XX 26-MAR-2001; 2001US-00817879.
XX PR 08-JUN-2001; 2001US-00877478.
XX PR 24-JUN-2001; 2001US-0296876P.
XX PR 08-OCT-2001; 2001US-0335059P.
XX PR 05-DEC-2001; 2001US-0337055P.
XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (BLAT/) BLATT L.
XX PA (MACE/) MACEJAK D.
XX PA (MCSW/) MCSWIGGEN J.
XX PA (MORR/) MORRISSEY D.
XX PA (PAVC/) PAVCO P.
XX PA (LEEP/) LEE P.
XX PA (DRAP/) DRAPER K.
XX PA (ROBE/) ROBERTS E.
XX
XX PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
XX PI Draper K, Roberts E;
XX
XX WPI; 2003-229207/22.
XX
XX PT Novel compound useful for treating cirrhosis, liver failure,
XX PT hepatocellular carcinoma, or condition associated with hepatitis C virus
XX PT infection.
XX
XX PS Claim 1; Page 248; 387pp; English.
XX
XX CC The present invention relates to nucleic acid molecules which modulate
XX CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
XX CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
XX CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
XX CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
XX CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
XX CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
XX CC as oligonucleotides that specifically bind the Enhancer I region of HBV
XX CC DNA. The nucleic acids may be used to modulate the expression of HBV
XX CC genes and HBV viral replication. Also disclosed is a method for screening
XX CC compounds and/or potential therapies directed against HBV, and compounds
XX CC that modulate the expression and/or replication of HCV. The compounds and
XX CC methods of the invention are useful for the treatment of degenerative and
XX CC disease states related to HBV and HCV infection, replication and gene
XX CC expression such as cirrhosis, liver failure, and hepatocellular
XX CC carcinoma. The present sequence represents a substrate for one of the HCV
XX CC DNazyme or minus strand DNazyme sequences disclosed in the present
XX CC invention
XX
XX SQ Sequence 17 BP; 5 A; 6 C; 5 G; 0 T; 1 U; 0 Other;
XX
XX Query Match 3.1%; Score 13.8; DB 1; Length 17;
XX Best Local Similarity 82.4%; Pred. No. 3.4e+02;
XX Matches 14; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
XX
Oy 432 AGGACTCGGCTCACACA 448
Db ||||| |||||
1 AGGACUGGGCCACACA 17

RESULT 336
ACD63046/C
ID ACD63046 standard; RNA; 17 BP.
XX
XX AC ACD63046;
XX
XX DT 24-SEP-2003 (first entry)
XX
XX DE HCV minus strand DNazyme substrate sequence #853.
XX
XX KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
XX KW RNA stability; RNA expression; RNA synthesis; antisense;
XX KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
XX KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
XX KW HBV reverse transcriptase; Enhancer I region; viral replication;
XX KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
XX KW virucide; antiinflammatory; substrate; ss.
XX
XX OS Hepatitis C virus.
XX
XX PN WO200281494-A1.
XX
XX PD 17-OCT-2002.
XX
XX PF 26-MAR-2002; 2002WO-US009187.

```

KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
 KW virucide; antiinflammatory; substrate; ss.  
 XX Hepatitis C virus.  
 OS  
 PN WO200281494-A1.  
 XX 17-OCT-2002.  
 XX  
 XX 26-MAR-2002; 2002WO-US009187.  
 PF  
 XX  
 XX 26-MAR-2001; 2001US-00817879.  
 PR  
 PR 08-JUN-2001; 2001US-00877478.  
 PR 08-JUN-2001; 2001US-0296876P.  
 PR 24-OCT-2001; 2001US-0335059P.  
 PR 05-DEC-2001; 2001US-0337055P.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA (BLAT/) BLATT L.  
 PA (MACE/) MACEJAK D.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (MORR/) MORRISSEY D.  
 PA (PAVC/) PAVCO P.  
 PA (LEBP/) LEE P.  
 PA (DRAP/) DRAPER K.  
 PA (ROBE/) ROBERTS E.  
 XX  
 XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
 PI Draper K, Roberts E;  
 XX WPI; 2003-229207/22.  
 DR  
 XX  
 XX Novel compound useful for treating cirrhosis, liver failure,  
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
 PT infection.  
 PT  
 XX  
 XX Claim 1; Page 290; 387pp; English.  
 XX  
 CC The present invention relates to nucleic acid molecules which modulate  
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,  
 CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed  
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
 CC DNA. The nucleic acids may be used to modulate the expression of HBV  
 CC genes and HBV viral replication. Also disclosed is a method for screening  
 CC compounds and/or potential therapies directed against HBV, and compounds  
 CC that modulate the expression and/or replication of HCV. The compounds and  
 CC methods of the invention are useful for the treatment of degenerative and  
 CC disease states related to HBV and HCV infection, replication and gene  
 CC expression such as cirrhosis, liver failure, and hepatocellular  
 CC carcinoma. The present sequence represents a substrate for one of the HCV  
 CC DNazyme or minus strand DNazyme sequences disclosed in the present  
 CC invention  
 XX  
 XX Sequence 17 BP; 3 A; 11 C; 2 G; 0 T; 1 U; 0 Other;  
 SQ  
 Query Match 3.1%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 88.2%; Pred. No. 3.4e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 20 TGGAGGGGTGGTGGCC 36  
 DB 17 TGGAGGGGTGGTGGCC 1  
 RESULT 337  
 AC68615/C  
 ID ACC68615 standard; DNA; 17 BP.  
 XX

AC ACC68615;  
 XX 01-JUL-2003 (first entry)  
 DT  
 XX Murine oligonucleotide associated with tumour suppression, SEQ ID 5862.  
 DE  
 XX  
 XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;  
 KW tumour suppression; tumour reversion; apoptosis; virus resistance;  
 KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;  
 KW schizophrenia; ss.  
 KW  
 XX Mus musculus.  
 OS  
 XX WO2003025176-A2.  
 PN  
 XX 27-MAR-2003.  
 PD  
 XX  
 XX 17-SEP-2002; 2002WO-IB004210.  
 PF  
 XX  
 XX 17-SEP-2001; 2001FR-00011979.  
 PR  
 XX (MOLE-) MOLECULAR ENGINES LAB.  
 PA  
 XX Telerman A, Amson R, Tuijnder M;  
 PI WPI; 2003-333167/31.  
 DR  
 XX  
 XX New isolated nucleic acid, useful for treating viral diseases associated  
 PT with tumors and cell degeneration, also related polypeptides, antibodies  
 PT and transfected cells.  
 PT  
 XX Disclosure; Page 716; 738pp; French.  
 PS  
 XX The present invention relates to murine oligonucleotides (ACC62754-  
 CC ACC6806), which are associated with tumour suppression, tumour  
 CC reversion, apoptosis and virus resistance. The oligonucleotides are  
 CC useful as (1) as probes and primers for detecting, identifying,  
 CC quantifying and/or amplifying nucleic acid, e.g. as one component of a  
 CC gene chip; in vitro as (anti)sense reagents; and (2) for production of a  
 CC recombinant polypeptides. The oligonucleotides are useful for preparation  
 CC of pharmaceuticals for prevention and/or treatment of viral diseases that  
 CC are characterised by development of tumours or cell degeneration,  
 CC specifically cancer but also Alzheimer's disease and schizophrenia  
 XX  
 XX Sequence 17 BP; 1 A; 6 C; 2 G; 8 T; 0 U; 0 Other;  
 SQ  
 Query Match 3.1%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 88.2%; Pred. No. 3.4e+02;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 368 AGGAAGAGGAAACGGGAGC 384  
 DB 17 AGGAAGAGGAAACGGGATC 1  
 RESULT 338  
 ADL47097  
 ID ADL47097 standard; RNA; 17 BP.  
 XX  
 XX ADL47097;  
 AC  
 XX 20-MAY-2004 (first entry)  
 DT  
 XX Human NOGO receptor zinzyme substrate sequence #84.  
 DE  
 XX antisense oligonucleotide; neurite growth inhibitor; NOGO;  
 KW prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;  
 KW protein kinase PAR; cerebrovascular accident;  
 KW central nervous system injury; CNS injury; spinal cord injury; cancer;  
 KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;  
 KW restenosis; asthma; Crohn's disease; diabetes; obesity;  
 KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;  
 KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;  
 KW

KW allergy; asthma; allergic rhinitis; atopic dermatitis;  
 KW NOGO receptor zinyne; substrate; ds.

OS Unidentified.

XX WO200281628-A2.

XX 17-OCT-2002.

XX 03-APR-2002; 2002WO-US010512.

XX 05-APR-2001; 2001US-00827395.

XX 29-MAY-2001; 2001US-0294412P.

XX 28-AUG-2001; 2001US-0315315P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fosnaugh K;

XX WPI; 2003-058513/05.

XX Novel enzymatic nucleic acid that down-regulates expression of neurite

XX growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or

XX protein kinase PKR genes, for treating cancer and inflammatory disease.

XX Claim 9; SEQ ID NO 630; 317pp; English.

XX The invention comprises nucleic acids (e.g. antisense oligonucleotides)  
 CC that down regulate the expression or inhibit the function of a receptor  
 CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),  
 CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the  
 CC invention are useful for treating: cerebrovascular accident, central  
 CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,  
 CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,  
 CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune  
 CC disease, lupus, multiple sclerosis, transplant/graft rejection,  
 CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic  
 CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The  
 CC nucleic acids of the invention are also useful for down-regulating the  
 CC expression of a target gene and as a diagnostic tool to examine genetic  
 CC drifts and mutations within diseased cells or to detect the presence of a  
 CC target RNA in a cell. The present RNA sequence represents a human NOGO  
 CC receptor zinyne substrate sequence.

XX SQ Sequence 17 BP; 0 A; 6 C; 8 G; 0 T; 3 U; 0 Other;

Query Match 3.1%; Score 13.8; DB 1; Length 17;

Best Local Similarity 76.5%; Pred. No. 3.4e+02; Length 17;  
 Matches 13; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Oy 263 GGCCCGGGGCTTCTCCG 279

Db 1 GGCCCGGGGCGUGUCCG 17

RESULT 339

ADL51921/c

ID ADL51921 standard; RNA; 17 BP.

XX AC ADL51921;

XX 20-MAY-2004 (first entry)

XX Human PTGDR substrate sequence #1040.

XX antisense oligonucleotide; neurite growth inhibitor; NOGO;

XX prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;

XX protein kinase PKR; cerebrovascular accident;

XX central nervous system injury; CNS injury; spinal cord injury; cancer;

XX melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;

XX restenosis; asthma; Crohn's disease; diabetes; obesity;

XX autoimmune disease; lupus; multiple sclerosis; transplant rejection;

XX graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;

KW allergy; asthma; allergic rhinitis; atopic dermatitis; human PTGDR;  
 KW substrate; ds.

OS Unidentified.

XX WO200281628-A2.

XX 17-OCT-2002.

XX 03-APR-2002; 2002WO-US010512.

XX 05-APR-2001; 2001US-00827395.

XX 29-MAY-2001; 2001US-0294412P.

XX 28-AUG-2001; 2001US-0315315P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fosnaugh K;

XX WPI; 2003-058513/05.

XX Novel enzymatic nucleic acid that down-regulates expression of neurite

XX growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or

XX protein kinase PKR genes, for treating cancer and inflammatory disease.

XX Claim 161; SEQ ID NO 5454; 317pp; English.

XX The invention comprises nucleic acids (e.g. antisense oligonucleotides)  
 CC that down regulate the expression or inhibit the function of a receptor  
 CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),  
 CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the  
 CC invention are useful for treating: cerebrovascular accident, central  
 CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,  
 CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,  
 CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune  
 CC disease, lupus, multiple sclerosis, transplant/graft rejection,  
 CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic  
 CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The  
 CC nucleic acids of the invention are also useful for down-regulating the  
 CC expression of a target gene and as a diagnostic tool to examine genetic  
 CC drifts and mutations within diseased cells or to detect the presence of a  
 CC target RNA in a cell. The present RNA sequence represents a human PKR  
 CC substrate sequence.

XX SQ Sequence 17 BP; 9 A; 2 C; 5 G; 0 T; 1 U; 0 Other;

Query Match 3.1%; Score 13.8; DB 1; Length 17;

Best Local Similarity 88.2%; Pred. No. 3.4e+02; Length 17;  
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy 96 CTGTTTTTCTCGTGAC 112

Db 17 CTGTTTTTCTCGTGAC 1

RESULT 340

ADL48304

ID ADL48304 standard; RNA; 17 BP.

XX AC ADL48304;

XX 20-MAY-2004 (first entry)

XX Human IKK-gamma substrate sequence #814.

XX antisense oligonucleotide; neurite growth inhibitor; NOGO;

XX prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;

XX protein kinase PKR; cerebrovascular accident;

XX central nervous system injury; CNS injury; spinal cord injury; cancer;

XX melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;

XX restenosis; asthma; Crohn's disease; diabetes; obesity;

XX autoimmune disease; lupus; multiple sclerosis; transplant rejection;

XX graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;

KW allergy; asthma; allergic rhinitis; atopic dermatitis; Human IKK-gamma;  
 KW substrate; ds.  
 XX  
 OS Unidentified.  
 XX  
 PN WO200281628-A2.  
 XX  
 PD 17-OCT-2002.  
 XX  
 PF 03-APR-2002; 2002WO-US010512.  
 XX  
 PR 05-APR-2001; 2001US-00827395.  
 PR 29-MAY-2001; 2001US-0294412P.  
 PR 28-AUG-2001; 2001US-0315315P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 PI Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fosnaugh K;  
 XX  
 DR WPI; 2003-058513/05.  
 XX  
 PT Novel enzymatic nucleic acid that down-regulates expression of neurite  
 PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or  
 PT protein kinase PKR genes, for treating cancer and inflammatory disease.  
 XX  
 PS Claim 59; SEQ ID NO 1837; 317pp; English.  
 XX  
 CC The invention comprises nucleic acids (e.g. antisense oligonucleotides)  
 CC that down regulate the expression or inhibit the function of a receptor  
 CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),  
 CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the  
 CC invention are useful for treating: cerebrovascular accident, central  
 CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,  
 CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,  
 CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune  
 CC disease, lupus, multiple sclerosis, transplant/graft rejection,  
 CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic  
 CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The  
 CC nucleic acids of the invention are also useful for down-regulating the  
 CC expression of a target gene and as a diagnostic tool to examine genetic  
 CC drifts and mutations within diseased cells or to detect the presence of a  
 CC target RNA in a cell. The present RNA sequence represents a human IKK-  
 CC gamma substrate sequence.  
 XX  
 SQ Sequence 17 BP; 1 A; 7 C; 7 G; 0 T; 2 U; 0 Other;  
 Query Match 3.1%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 76.5%; Pred. No. 3.4e+02;  
 Matches 13; Conservative 2; Mismatches 2; Indels 0; Gaps 0;  
 QY 249 TGGAGCGCGCGTCCGC 265  
 Db :|||||||:|  
 1 UGGAGCGCGCGCCGC 17  
 RESULT 341  
 ADL48303  
 ID ADL48303 standard; RNA; 17 BP.  
 XX  
 AC ADL48303;  
 XX  
 DT 20-MAY-2004 (first entry)  
 XX  
 DE Human IKK-gamma substrate sequence #813.  
 XX  
 KW antisense oligonucleotide; neurite growth inhibitor; NOGO;  
 KW prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;  
 KW protein kinase PKR; cerebrovascular accident;  
 KW central nervous system injury; CNS injury; spinal cord injury; cancer;  
 KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;  
 KW restenosis; asthma; Crohn's disease; diabetes; obesity;  
 KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;  
 KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;

KW allergy; asthma; allergic rhinitis; atopic dermatitis; Human IKK-gamma;  
 KW substrate; ds.  
 XX  
 OS Unidentified.  
 XX  
 PN WO200281628-A2.  
 XX  
 PD 17-OCT-2002.  
 XX  
 PF 03-APR-2002; 2002WO-US010512.  
 XX  
 PR 05-APR-2001; 2001US-00827395.  
 PR 29-MAY-2001; 2001US-0294412P.  
 PR 28-AUG-2001; 2001US-0315315P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 PI Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fosnaugh K;  
 XX  
 DR WPI; 2003-058513/05.  
 XX  
 PT Novel enzymatic nucleic acid that down-regulates expression of neurite  
 PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or  
 PT protein kinase PKR genes, for treating cancer and inflammatory disease.  
 XX  
 PS Claim 59; SEQ ID NO 1836; 317pp; English.  
 XX  
 CC The invention comprises nucleic acids (e.g. antisense oligonucleotides)  
 CC that down regulate the expression or inhibit the function of a receptor  
 CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),  
 CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the  
 CC invention are useful for treating: cerebrovascular accident, central  
 CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,  
 CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,  
 CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune  
 CC disease, lupus, multiple sclerosis, transplant/graft rejection,  
 CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic  
 CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The  
 CC nucleic acids of the invention are also useful for down-regulating the  
 CC expression of a target gene and as a diagnostic tool to examine genetic  
 CC drifts and mutations within diseased cells or to detect the presence of a  
 CC target RNA in a cell. The present RNA sequence represents a human IKK-  
 CC gamma substrate sequence.  
 XX  
 SQ Sequence 17 BP; 1 A; 6 C; 8 G; 0 T; 2 U; 0 Other;  
 Query Match 3.1%; Score 13.8; DB 1; Length 17;  
 Best Local Similarity 76.5%; Pred. No. 3.4e+02;  
 Matches 13; Conservative 2; Mismatches 2; Indels 0; Gaps 0;  
 QY 246 GCCTGGAGCGCGGTC 262  
 Db :|||||||:|  
 1 GCGUGAGCGCGCGC 17  
 RESULT 342  
 ADM53854/c  
 ID ADM53854 standard; mRNA; 17 BP.  
 XX  
 AC ADM53854;  
 XX  
 DT 03-JUN-2004 (first entry)  
 XX  
 DE Human GRID mRNA substrate sequence #129.  
 XX  
 KW Human; ss; GRID; Grb2-related with insert domain; hammerhead ribozyme;  
 KW NCH ribozyme; G-cleaver ribozyme; Zinzyme; DNazyme; Inozyme;  
 KW hairpin ribozyme; tissue rejection; graft rejection; leukaemia.  
 XX  
 OS Homo sapiens.  
 XX  
 PN US2003134806-A1.  
 XX



PA (MCSW/) MCSWIGGEN J.  
PA (ROBE/) ROBERTS E.  
PA (PAVC/) PAVCO P A.  
PA (MACE/) MACEJACK D.  
XX  
PI Blatt L, Mcswiggen J, Roberts E, Pavco PA, Macejack D;  
XX  
DR WPI; 2004-031273/03.  
XX  
XX  
PT Enzymatic nucleic acid molecules which specifically cleave RNA derived  
PT from hepatitis C virus (HCV), useful for the treatment of HCV infections,  
PT especially in combination with type I interferon therapy.  
XX  
XX  
XX Claim 1; SEQ ID NO 3130; 198pp; English.  
XX  
CC The invention relates to an enzymatic nucleic acid molecule which  
CC specifically cleaves RNA derived from hepatitis C virus (HCV), in which  
CC the binding arms of the enzymatic nucleic acid molecule comprises  
CC sequences complementary to any of the defined substrate sequences given  
CC in the specification. The nucleic acid molecule may be administered for  
CC the treatment of HCV infections, especially in combination with type I  
CC interferons. The present sequence represents a HCV DNzyme substrate  
CC sequence.  
XX  
XX Sequence 17 BP; 3 A; 11 C; 2 G; 0 T; 1 U; 0 Other;  
SQ  
Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 3.4e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 20 TGGAGGGGTGGTGGCC 36  
||||||| |||||  
Db 17 TGGAGGGGTGGTGGCC 1  
  
RESULT 345  
AA62696  
ID AAX62696 standard; RNA; 18 BP.  
XX  
AC AAX62696;  
XX  
XX  
DT 16-JUL-1999 (first entry)  
XX  
DE Granule bound starch synthase hairpin substrate SEQ ID NO:571.  
XX  
XX  
XX Maize; corn; Zea mays; delta-9 desaturase; GBSS; target; substrate;  
XX granule bound starch synthase; hammerhead ribozyme; hairpin ribozyme;  
XX modulation; gene expression; transgenic plant; Cleavage; canola plant;  
XX caffeine synthesis; coffee plant; nicotine production; tobacco;  
XX fruit ripening; flower pigmentation; lignin production; ss.  
XX  
XX Zea mays.  
XX  
XX WO9710328-A2.  
XX  
XX 20-MAR-1997.  
XX  
XX 12-JUL-1996; 96WO-US011689.  
XX  
XX 13-JUL-1995; 95US-0001135P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
XX (DOWC ) DOWELANCO.  
XX  
XX Zwick MG, Edington BE, Mcswiggen JA, Merlo PAO, Guo L, Skokut TA;  
XX Young SA, Folkerts O, Merlo DJ;  
XX WPI; 1997-202224/18.  
XX  
XX Ribozyme which modulates plant gene expression - preferably modulates  
XX expression of DELTA-9 desaturase or granule bound starch synthase in  
XX maize or canola.  
XX

PS Claim 42; Page 83; 155pp; English.  
XX  
CC The present invention describes an enzymatic nucleic acid molecule (I)  
CC with RNA cleaving activity, which modulates the expression of a plant  
CC gene. Also described is a gene comprising a cDNA sequence encoding maize  
CC Delta-9 desaturase. (I) can be used to modulate expression of a gene,  
CC preferably Delta-9 desaturase or a granule bound starch synthase (GBSS)  
CC gene, in a plant (preferably a maize or canola plant). (I) can be used to  
CC modulate caffeine synthesis in a coffee plant, nicotine production in a  
CC tobacco plant, fruit ripening processes in an apple, tomato, pear, plum  
CC or peach plant, flower pigmentation in a rose, petunia, chrysanthemum or  
CC marigold plant or lignin production in a tobacco, aspen, poplar or pine  
CC plant  
XX  
XX Sequence 18 BP; 1 A; 9 C; 7 G; 0 T; 1 U; 0 Other;  
SQ  
Query Match 3.1%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 82.4%; Pred. No. 3.6e+02;  
Matches 14; Conservative 1; Mismatches 2; Indels 0; Gaps 0;  
QY 134 CGGCCTGCCGCTTCCA 150  
||||:|||||  
Db 2 CGGCCUGCCGCGCCA 18  
  
RESULT 346  
AAV35627/C  
ID AAV35627 standard; DNA; 18 BP.  
XX  
AC AAV35627;  
XX  
DT 07-SEP-1998 (first entry)  
XX  
DE SHOX gene exon II (ET93) specific antisense primer ASP3.  
XX  
XX Homeobox domain; human growth gene; growth regulation; growth defect;  
XX turner's syndrome; short stature homeobox containing gene; short stature;  
XX SHOX; bone disease; osteoporosis; calcium regulation; PCR primer; ss.  
XX  
XX Synthetic.  
XX Homo sapiens.  
XX  
XX WO9814568-A1.  
XX  
XX 09-APR-1998.  
XX  
XX 29-SEP-1997; 97WO-EP005355.  
XX  
XX 01-OCT-1996; 96US-0027633P.  
XX  
XX 16-JAN-1997; 97EP-00100583.  
XX  
XX (RAPP/) RAPPOLD-HOERBRAND G.  
XX  
XX Rappold-Hoerbrand G, Rao E;  
XX WPI; 1998-271719/24.  
XX  
XX New human growth genes - used to develop products for the diagnosis and  
XX treatment of human growth defects such as short stature, e.g. Turner's  
XX syndrome.  
XX  
XX Disclosure; Page 11; 84pp; English.  
XX  
CC This exon specific primer used in the PCR amplification of a short  
CC stature associated sequence. The gene region corresponding to short  
CC stature has been identified as a region of approximately 500 kb in the  
CC PAR1 region of the X and Y chromosomes. Three genes in this region have  
CC been identified as candidates for the short stature gene. These genes  
CC were designated SHOX (also referred to as SHOX93 or HOX93), pET92 and  
CC SHOT (SHOX-like homeobox gene on chromosome three). The SHOX gene has two  
CC separate splicing sites resulting in two variations SHOXa and SHOXb. The  
CC specification provides sequences of SHOX (short stature homeobox-  
CC containing) genes SHOX ET92, SHOXa, SHOXb, SHOT and exons of the SHOX



CC genes as shown in AAV35610 to AAV35621 and protein sequences of the human  
 CC growth protein transcription factor SHOXa, SHOXb and SHOXc as shown  
 CC AAW60573 to AAW60575. The novel genes are responsible for human growth.  
 CC Defects in the genes can cause short stature, e.g. Turner's syndrome. The  
 CC products can be used to develop agents for the treatment of short stature  
 CC or other human growth disorders. The products can also be used for  
 CC providing a mitogenic effect on cells, e.g. for the treatment of bone  
 CC diseases such as osteoporosis and diseases involved with disturbance in  
 CC the bone calcium regulation  
 XX  
 SQ Sequence 18 BP; 0 A; 14 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 3.1%; Score 13.8; DB 1; Length 18;

Best Local Similarity 88.2%; Pred. No. 3.6e+02; Mismatches 2; Indels 0; Gaps 0;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 332 CGGGGGCGAGGCGGAGG 348  
 Db 17 CGGGGGCGGGCGGGG 1

RESULT 347

ADL88552/C

ID ADL88552 standard; DNA; 18 BP.

XX AC ADL88552;

XX AC 20-MAY-2004 (first entry)

XX DE Probe 52 used to detect polymorphism in human HLA-DRB1 exon 2 DNA.

XX KW polymorphism; genetic variation; exon 2; HLA-DRB1; human; probe; ss.

XX OS Homo sapiens.

XX OS Synthetic.

XX FN JP2004024247-A.

XX PD 29-JAN-2004.

XX PF 30-APR-2003; 2003JP-00126006.

XX PR 30-APR-2002; 2002JP-00129069.

XX PA (KOKU-) KOKUSAI SHIYAKU KK.

XX DR WPI; 2004-127112/13.

XX PT Novel probe for detecting gene polymorphism, contains oligonucleotide  
 PT which is complementary to target sequence, has artificial mismatch with  
 PT respect to target, and has original mismatch with respect to allelic  
 PT variant of target.

XX FS Claim 1; SEQ ID NO 52; 74pp; Japanese.

XX The invention relates to a novel probe for hybridising to a target  
 CC nucleic acid and detecting gene polymorphisms. The probe comprises a base  
 CC sequence that is complementary to the target nucleic acid and has at  
 CC least one artificial mismatch and at least one original mismatch with  
 CC respect to the target nucleic acid, where the artificial mismatch and  
 CC original mismatch exist in different base positions. The probe of the  
 CC invention may be useful for detecting genetic variation by gene  
 CC amplification, mutation-specific DNA sequencing or a mutation-specific  
 CC DNA chip, preferably for detecting a polymorphism in exon 2 of HLA-DRB1.  
 CC The current sequence is that of a probe of the invention which was used  
 CC to detect a polymorphism in human HLA-DRB1 exon 2 DNA.

XX SQ Sequence 18 BP; 2 A; 6 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 3.1%; Score 13.8; DB 1; Length 18;

Best Local Similarity 88.2%; Pred. No. 3.6e+02; Mismatches 2; Indels 0; Gaps 0;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 262 CGGGCCGGGGCTTCTCC 278  
 Db 18 CGGGCCGGGGCTTCTCC 2

RESULT 348

ADMA2858

ID ADMA2858 standard; DNA; 18 BP.

XX AC ADMA2858;

XX XX 03-JUN-2004 (first entry)

XX DE DNA oligo to construct an odourant receptor expression vector SeqID102.

XX KW ss; chemical sensor system; taste; smell; artificial sensory organ;

XX KW olfactory stimulation; food industry; hygiene inspection;

XX KW environmental examination; disease diagnosis; carvone.

XX OS Synthetic.

XX FN WO2003100057-A1.

XX PD 04-DEC-2003.

XX XX 28-MAY-2003; 2003WO-JP006719.

XX PR 28-MAY-2002; 2002JP-00154239.

XX PR 13-JUN-2002; 2002JP-00172412.

XX PR 14-JAN-2003; 2003JP-00005175.

XX PA (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.

XX PI Sato T, Hirono J, Hamana H, Miyake M, Yoshikawa T, Miyake J;

XX DR WPI; 2004-023356/02.

XX Chemical sensor systems based on chemical receptors introduced into cells  
 PT for immobilization onto support to form chip as component of sensor,  
 PT useful in detecting stimuli e.g. taste and smell applicable in food  
 PT industry.

XX PS Example 9; SEQ ID NO 102; 521pp; Japanese.

XX This invention relates to a novel chemical sensor system method.

CC Specifically, it refers to an isolated nucleic acid molecule that encodes  
 CC a receptor protein, which binds to chemicals that can stimulate the sense  
 CC of taste or smell for example. The present invention describes the  
 CC manufacture of a chip that acts as a support to immobilise transfected  
 CC cells expressing the receptor gene, such that this chip can be employed  
 CC as a component of the chemical sensor model. Furthermore, this chip is  
 CC useable as an artificial sensory organ where the chemical receptor  
 CC contains an olfactory receptor the sensor can react to olfactory  
 CC stimulation. Accordingly, these sensors are useful in the food industry  
 CC for analysing freshness of meat, fruit and vegetables, hygiene  
 CC inspection, environmental examination and disease diagnosis. Furthermore,  
 CC such systems are automatable for high throughput applications under  
 CC various conditions, even for differentiating optical isomers of R(-)-  
 CC carvone from S(+)-carvone easily. This oligonucleotide sequence is used  
 CC to construct an odourant receptor DNA expression vector of the invention.

XX SQ Sequence 18 BP; 5 A; 8 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 3.1%; Score 13.8; DB 1; Length 18;

Best Local Similarity 88.2%; Pred. No. 3.6e+02; Mismatches 2; Indels 0; Gaps 0;

Qy 237 CCGAACCCCGCTGGAG 253

Db 2 CCGAACCCCGCTGGAG 18

RESULT 349



PR 24-FEB-2000; 2000US-0184594P.  
XX (RIBO-) RIBOZYME PHARM INC.  
XX (GLAX ) GLAXO GROUP LTD.  
XX  
PI Jarvis T, Von Carlowitz I, Mcswiggen JA, Hamblin PA, Ellis JH;  
XX WPI; 2001-550088/61.  
XX  
XX New nucleic acid(s) for regulating the Grb2-related with Insert Domain  
XX (GRID) gene comprises using antisense and enzymatic nucleic acid  
XX molecules such as hammerhead ribozymes.  
XX  
XX Claim 4; Page 67; 108pp; English.  
XX  
XX The present invention relates to oligonucleotides that downregulate the  
XX expression of human Grb2-related with Insert Domain (GRID) gene. GRID is  
XX a T-cell co-stimulatory adaptor protein. The oligonucleotides are useful  
XX for modulating the expression of GRID, to treat conditions such as  
XX tissue/graft rejection and leukaemia. The oligonucleotides can also be  
XX administered in conjunction with other therapies such as radiation,  
XX chemotherapy and cyclosporin treatment. The present oligonucleotide was  
XX used to illustrate the invention  
XX  
XX Sequence 17 BP; 3 A; 4 C; 9 G; 0 T; 1 U; 0 Other;  
SQ  
Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 3.6e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 132 CTCGCCCTGCCGCT 146  
Db 16 CTCGCCCTGCCGCT 2  
RESULT 352  
ABK18834/C  
ID ABK18834 standard; RNA; 17 BP.  
XX AC ABK18834;  
XX  
XX 09-APR-2002 (first entry)  
XX Human ERG DNazyme target sequence Seq ID No 1481.  
DE  
XX Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;  
XX ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;  
XX vulnery; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;  
XX tumour angiogenesis; diabetic retinopathy; macular degeneration;  
XX neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;  
XX angiofibroma of tuberous sclerosis; port-wine stain; wound healing;  
XX Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
XX Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNazyme; inozyme;  
XX amberzyme.  
XX  
XX Homo sapiens.  
XX  
XX WO200188124-A2.  
XX  
XX 22-NOV-2001.  
XX  
XX 16-MAY-2001; 2001WO-US015866.  
XX  
XX 16-MAY-2000; 2000US-00572021.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
XX (GLAX ) GLAXO GROUP LTD.  
XX  
XX Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;  
XX WPI; 2002-082995/11.  
XX  
XX Novel polynucleotide which down regulates expression of Ets-related gene,  
FT

PT useful for treating cancer, diabetic retinopathy, macular degeneration,  
XX arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.  
XX  
XX Claim 4; Page 93; 149pp; English.  
XX  
XX The invention relates to a nucleic acid molecule (I) which down regulates  
XX expression of an Ets-related gene (ERG). (I) is useful for treating  
XX conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
XX tumour angiogenesis, diabetic retinopathy, macular degeneration,  
XX neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
XX vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge  
XX Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu  
XX syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
XX treating a patient having a condition associated with the level of ERG,  
XX by contacting cells of the patient with (I) under conditions suitable for  
XX the treatment. The method comprises the use of one or more therapies  
XX under conditions suitable for the treatment. Leukaemia or tumour  
XX angiogenesis is treated by administering (I) to the patient in  
XX conjunction with one or more of other therapies such as radiation or  
XX chemotherapy treatment. (I) is useful for reducing ERG activity in a  
XX cell, by contacting the cell with (I). (I) is useful for cleaving RNA of  
XX ERG gene, by contacting (I) with RNA, in the presence of a divalent  
XX cation such as Mg2+. (I) is useful for diagnosis of conditions and  
XX diseases related to the expression of ERG, and as diagnostic tool to  
XX examine genetic drift and mutations within diseased cells or to detect  
XX the presence of ERG RNA in a cell. (I) is useful for specifically  
XX targeting genes that share homology with ERG gene or ERG fusion genes.  
XX ABK17354-ABK22719 represent nucleic acids, including antisense and  
XX enzymatic nucleic acid molecules which regulate expression of ERG, and  
XX related PCR primers of the invention  
XX  
XX Sequence 17 BP; 1 A; 5 C; 6 G; 0 T; 5 U; 0 Other;  
SQ  
Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 3.6e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 124 GGAAGAGCCTCGGCC 138  
Db 16 GGAAGAGCCTCGGCC 2  
RESULT 353  
AAL44028  
ID AAL44028 standard; DNA; 17 BP.  
XX AC AAL44028;  
XX  
XX 27-SEP-2002 (first entry)  
XX Human cytochrome P4502A6 (CYP4502A6) promoter - polymorphic region 3.  
DE  
XX Human; ds; single nucleotide polymorphism; SNP; cytochrome; P4502A6;  
XX CYP4502A6; CYP2A6; Chromosome 19; steroid metabolism;  
XX drug detoxification; xenobiotic detoxification; procarcinogen activation;  
XX inflammation; asthma; habitual smoking.  
XX  
XX Homo sapiens.  
XX  
XX Key Location/Qualifiers  
XX variation replace(10, C)  
XX /\*tag= a  
XX /standard\_name= "Single nucleotide polymorphism"  
XX  
XX WO200194633-A1.  
XX  
XX 13-DEC-2001.  
XX  
XX 01-JUN-2001; 2001WO-US017781.  
XX  
XX 02-JUN-2000; 2000US-00586376.  
XX  
XX (DNAS-) DNA SCI INC.

XX PI Guida M, Hall J;  
 XX DR WPI; 2002-566448/60.  
 XX PT New isolated polynucleotide, useful to screen individuals for asthma,  
 XX PT inflammation and susceptibility to habitual smoking, comprises base  
 XX PT variation from that of known human cytochrome P4502A6 sequence.  
 XX PS Claim 35; Page 27; 48pp; English.  
 XX CC The invention comprises the identification of genetic polymorphisms in  
 CC CC the human cytochrome P4502A6 (CYP4502A6 or CYP2A6) gene. The human  
 CC CC cytochrome P4502A6 gene is located on chromosome 19 and encodes an enzyme  
 CC CC that plays a role in the metabolism of steroids, the detoxification of  
 CC CC drugs and xenobiotics, and the activation of procarcinogens. The P4502A6  
 CC CC polymorphisms identified in the invention are useful for evaluating an  
 CC CC individual's risk of developing asthma or an individual's propensity for  
 CC CC cigarette consumption. The P4502A6 DNA sequences of the invention are  
 CC CC useful for identifying individuals having a polymorphic genotype and to  
 CC CC screen individuals for altered metabolism for cytochrome P4502A6  
 CC CC substrates. The P4502A6 DNA sequences of the invention are also useful  
 CC CC for identifying individuals who are at risk from inflammation, asthma,  
 CC CC habitual smoking and diseases that result from environmental or  
 CC CC occupational exposures to dangerous substances. The present DNA sequence  
 CC CC represents a polymorphic region of the promoter for the human cytochrome  
 CC CC P4502A6 gene  
 XX SQ Sequence 17 BP; 4 A; 5 C; 1 G; 7 T; 0 U; 0 Other;  
 Query Match 3.0%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 3.6e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 41 TTGTGCTACCCCTAA 55  
 Db 3 TTGTGCTTACCCCTAA 17  
 RESULT 354  
 ID AAL44029  
 AC AAL44029;  
 DT 27-SEP-2002 (first entry)  
 XX Human cytochrome P4502A6 (CYP4502A6) promoter - polymorphic region 4.  
 DE Human; ds; single nucleotide polymorphism; SNP; cytochrome; P4502A6;  
 KW CYP4502A6; CYP2A6; chromosome 19; steroid metabolism;  
 KW drug detoxification; xenobiotic detoxification; procarcinogen activation;  
 KW inflammation; asthma; habitual smoking.  
 XX Homo sapiens.  
 OS  
 XX Key Location/Qualifiers  
 PH replace(10, 1)  
 FT /\*tag= a  
 FT /standard\_name= "Single nucleotide polymorphism"  
 XX WO200194633-A1.  
 XX 13-DEC-2001.  
 XX 01-JUN-2001; 2001WO-US017781.  
 XX 02-JUN-2000; 2000US-00586376.  
 XX (DNAS-) DNA SCI INC.  
 XX Guida M, Hall J;  
 XX

DR WPI; 2002-566448/60.  
 XX New isolated polynucleotide, useful to screen individuals for asthma,  
 PT inflammation and susceptibility to habitual smoking, comprises base  
 PT variation from that of known human cytochrome P4502A6 sequence.  
 XX Claim 1; Page 27; 48pp; English.  
 XX The invention comprises the identification of genetic polymorphisms in  
 CC the human cytochrome P4502A6 (CYP4502A6 or CYP2A6) gene. The human  
 CC cytochrome P4502A6 gene is located on chromosome 19 and encodes an enzyme  
 CC that plays a role in the metabolism of steroids, the detoxification of  
 CC drugs and xenobiotics, and the activation of procarcinogens. The P4502A6  
 CC polymorphisms identified in the invention are useful for evaluating an  
 CC individual's risk of developing asthma or an individual's propensity for  
 CC cigarette consumption. The P4502A6 DNA sequences of the invention are  
 CC useful for identifying individuals having a polymorphic genotype and to  
 CC screen individuals for altered metabolism for cytochrome P4502A6  
 CC substrates. The P4502A6 DNA sequences of the invention are also useful  
 CC for identifying individuals who are at risk from inflammation, asthma,  
 CC habitual smoking and diseases that result from environmental or  
 CC occupational exposures to dangerous substances. The present DNA sequence  
 CC represents a polymorphic region of the promoter for the human cytochrome  
 CC P4502A6 gene  
 XX SQ Sequence 17 BP; 4 A; 6 C; 1 G; 6 T; 0 U; 0 Other;  
 Query Match 3.0%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 3.6e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 41 TTGTGCTACCCCTAA 55  
 Db 3 TTGTGCTTACCCCTAA 17  
 RESULT 355  
 ID ACA07669  
 AC ACA07669;  
 XX 03-JUN-2003 (first entry)  
 DT NFkB sub-unit modulating zinzyme substrate #68.  
 DE Enzymatic nucleic acid; nuclear factor kappa B; NFkB; inozyme; zinzyme;  
 KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;  
 KW lung cancer; prostate cancer; colorectal cancer; brain cancer;  
 KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;  
 KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;  
 KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;  
 KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;  
 KW cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;  
 KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;  
 KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;  
 KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;  
 KW transplant/graft rejection; reperfusion injury; glomerulonephritis;  
 KW allergic airway inflammation; inflammatory bowel disease; infection; ss.  
 XX Homo sapiens.  
 OS  
 XX US2002177569-A1.  
 XX 28-NOV-2002.  
 XX 23-MAY-2001; 2001US-00864785.  
 XX 07-DEC-1992; 92US-00987132.  
 XX 18-MAY-1994; 94US-00245466.  
 XX 15-AUG-1994; 94US-00291932.  
 XX 23-DEC-1996; 96US-00777916.

PA	(STIN/) STINCHOMB D T.
PA	(MCSW) MCSWIGGEN J.
PA	(DRAP/) DRAPER K G.
XX	
XX	Stinchcomb DT, Mcswiggen J, Draper KG;
PI	
XX	
DR	WPI; 2003-340953/32.
XX	
PT	Novel enzymatic nucleic acid molecules which down regulates expression of
PT	a sequence encoding a subunit of nuclear factor kappa B useful for
PT	treating cancer, inflammatory disorders and autoimmune diseases.
XX	
PS	Claim 3; Page 38; 72pp; English.
XX	
CC	The invention describes an enzymatic nucleic acid molecule (I) which down
CC	regulates expression of a sequence encoding a subunit of nuclear factor
CC	kappa B (NFkB), where (I) is an inozyme, zinozyme, G-cleaver or amberzyme
CC	configuration. The enzymatic nucleic acid molecule is adapted to treat
CC	cancer and is useful for down-regulating REL-A activity in a cell, for
CC	treating a patient having a condition associated with the level of REL-A.
CC	(I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
CC	the presence of a divalent cation, especially Mg <sup>2+</sup> . The enzymatic and
CC	antisense nucleic acid molecules are useful for treating breast, lung,
CC	prostate, colorectal, brain, oesophagaeal, stomach, bladder, pancreatic,
CC	cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
CC	multidrug resistant cancer. The method involves use of other drug
CC	therapies such as monoclonal antibodies, REL-A-specific inhibitors or
CC	chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC	cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
CC	gemcitabine or radiation therapy. The enzymatic and antisense nucleic
CC	acid molecules are also useful for treating inflammatory disease such as
CC	rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
CC	obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
CC	rejection, gene therapy applications, ischaemia/reperfusion injury
CC	(central nervous system (CNS) and myocardial), glomerulonephritis,
CC	sepsis, allergic airway inflammation, inflammatory bowel disease or
CC	nucleic acid molecule
XX	
SQ	Sequence 17 BP; 0 A; 9 C; 4 G; 0 T; 4 U; 0 Other;
Query Match                 3.0%; Score 13.4; DB 1; Length 17;	
Best Local Similarity      73.3%; Pred. No. 3.6e+02;	
Matches    11; Conservative    3; Mismatches    1; Indels    0; Gaps    0;	
QY	132 CTCGGCTCGCGGCT 146
Dd	:               :
	1 CUCGCCUGCGCCU 15
RESULT 356	
ABZ66556	
ID	ABZ66556 standard; RNA; 17 BP.
XX	
AC	ABZ66556;
XX	
XX	
DT	21-MAR-2003 (first entry)
XX	
DE	Human HIV DNA yme substrate #13.
XX	
KW	Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW	enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW	anti-rheumatic; cancer; AIDS; ss.
XX	
OS	Homo sapiens.
XX	
PN	WO200297114-A2.
XX	
PD	05-DEC-2002.
XX	
PF	29-MAY-2002; 2002WO-US016840.
XX	
KW	Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW	enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW	anti-rheumatic; cancer; AIDS; ss.
XX	
OS	Homo sapiens.
XX	
PN	WO200297114-A2.
XX	
PD	05-DEC-2002.
XX	
PF	29-MAY-2002; 2002WO-US016840.
XX	
PT	Novel short interfering RNA and enzymatic nucleic acid useful for
PT	treating cancer, modulates the expression of a nucleic acid encoding
XX	

PR	06-JUN-2001; 2001US-0296249P.
PR	10-SEP-2001; 2001US-0318471P.
XX	
PA	(RIBO-) RIBOZYME PHARM INC.
XX	
XX	Mcswiggen J;
PI	
XX	
DR	WPI; 2003-140484/13.
XX	
PT	Novel short interfering RNA and enzymatic nucleic acid useful for
PT	treating cancer, modulates the expression of a nucleic acid encoding
PT	HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX	
PS	Claim 123; Page 157; 185pp; English.
XX	
CC	The invention relates to a novel short interfering RNA (siRNA) nucleic
CC	acid molecule or an enzymatic nucleic acid molecule, that modulates
CC	expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC	human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC	acid molecule of the invention has cytosstatic, anti-HIV, and anti-
CC	rheumatic activity. The nucleic acid molecules are useful for reducing
CC	HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC	also useful for treating breast, ovarian, colorectal, lung, prostate,
CC	bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC	shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC	ABZ66530 - ABZ66595 represent substrate/target sequences for the human
CC	ribosymes of the invention
XX	
SQ	Sequence 17 BP; 3 A; 5 C; 6 G; 0 T; 3 U; 0 Other;
Query Match                 3.0%; Score 13.4; DB 1; Length 17;	
Best Local Similarity      80.0%; Pred. No. 3.6e+02;	
Matches    12; Conservative    2; Mismatches    1; Indels    0; Gaps    0;	
QY	428 ACCCAGGACTCGGCT 442
Dd	:               :
	2 ACCGAGGACUCGCCU 16
RESULT 357	
ABZ66567	
ID	ABZ66567 standard; RNA; 17 BP.
XX	
AC	ABZ66567;
XX	
DT	21-MAR-2003 (first entry)
XX	
DE	Human HIV amberyze substrate #19.
XX	
KW	Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW	enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW	anti-rheumatic; cancer; AIDS; ss.
XX	
OS	Homo sapiens.
XX	
PN	WO200297114-A2.
XX	
PD	05-DEC-2002.
XX	
PF	29-MAY-2002; 2002WO-US016840.
XX	
KW	Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW	enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW	anti-rheumatic; cancer; AIDS; ss.
XX	
OS	Homo sapiens.

PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.  
XX  
PS Claim 123; Page 158; 185pp; English.  
XX  
CC The invention relates to a novel short interfering RNA (siRNA) nucleic acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524, ABZ66530 - ABZ66585 represent substrate/target sequences for the human CC ribozymes of the invention  
XX  
SQ Sequence 17 BP; 3 A; 6 C; 6 G; 0 T; 2 U; 0 Other;  
Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 80.0%; Pred. No. 3.6e+02;  
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;  
QY 428 ACCGAGGACTCGGCT 442  
DB 3 ACGCAGGACUCGGCU 17  
||| |||||:||||:  
||| |||||:||||:  
RESULT 358  
ACD64058/c  
ID ACD64058 standard; RNA; 17 BP.  
XX  
AC ACD64058;  
XX  
DT 30-SEP-2003 (first entry)  
XX  
DE HCV minus strand DNazyme substrate sequence #1361.  
XX  
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
KW RNA stability; RNA expression; RNA synthesis; antisense;  
KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;  
KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;  
KW HBV reverse transcriptase; Enhancer I region; viral replication;  
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
KW virucide; antiinflammatory; substrate; ss.  
XX  
OS Hepatitis C virus.  
XX  
PN WO200281494-A1.  
XX  
PD 17-OCT-2002.  
XX  
PF 26-MAR-2002; 2002WO-US009187.  
XX  
PR 26-MAR-2001; 2001US-00817879.  
XX  
PR 08-JUN-2001; 2001US-00877478.  
XX  
PR 08-JUN-2001; 2001US-0296876P.  
XX  
PR 24-OCT-2001; 2001US-0335059P.  
XX  
PR 05-DEC-2001; 2001US-0337055P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MACE/) MACEJAK D.  
PA (MCSW/) MCSWIGGEN J.  
PA (MORR/) MORRISSEY D.  
PA (PAVC/) PAVCO P.  
PA (LEEP/) LEE P.  
PA (DRAP/) DRAPER K.  
PA (ROBE/) ROBERTS E.  
XX  
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
FI Draper K, Roberts E;

XX WPI; 2003-229207/22.  
XX  
XX Novel compound useful for treating cirrhosis, liver failure,  
PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
PT infection.  
XX  
PS Claim 1; Page 299; 387pp; English.  
XX  
CC The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes, inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase and/or HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV genes and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds and methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HCV DNazyme or minus strand DNazyme sequences disclosed in the present invention  
XX  
SQ Sequence 17 BP; 2 A; 7 C; 6 G; 0 T; 2 U; 0 Other;  
Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 3.6e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 210 ACCTGCGGCGGTCG 224  
DB 17 ACCTGCGGCGGTCG 3  
||||| ||||| |||||  
||||| ||||| |||||  
RESULT 359  
ACD58611  
ID ACD58611 standard; RNA; 17 BP.  
XX  
AC ACD58611;  
XX  
DT 24-SEP-2003 (first entry)  
XX  
DE HCV DNazyme substrate sequence #917.  
XX  
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
KW RNA stability; RNA expression; RNA synthesis; antisense; zinzyme;  
KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;  
KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;  
KW HBV reverse transcriptase; Enhancer I region; viral replication;  
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
KW virucide; antiinflammatory; substrate; ss.  
XX  
OS Hepatitis C virus.  
XX  
PN WO200281494-A1.  
XX  
PD 17-OCT-2002.  
XX  
PF 26-MAR-2002; 2002WO-US009187.  
XX  
PR 26-MAR-2001; 2001US-00817879.  
XX  
PR 08-JUN-2001; 2001US-00877478.  
XX  
PR 08-JUN-2001; 2001US-0296876P.  
XX  
PR 24-OCT-2001; 2001US-0335059P.  
XX  
PR 05-DEC-2001; 2001US-0337055P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.

PA (BLAT//) BLATT L.  
 PA (MACE//) MACEJAK D.  
 PA (MCSW//) MCSWIGGEN J.  
 PA (MORR//) MORRISSEY D.  
 PA (PAVC//) PAVCO P.  
 PA (LEEP//) LEE P.  
 PA (DRAP//) DRAPER K.  
 PA (ROBE//) ROBERTS E.  
 XX  
 XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
 PI Draper K, Roberts E;  
 XX  
 XX WPI; 2003-229207/22.  
 DR  
 XX Novel compound useful for treating cirrhosis, liver failure,  
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
 PT infection.  
 XX  
 PS Claim 1; Page 250; 387pp; English.  
 XX  
 CC The present invention relates to nucleic acid molecules which modulate  
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,  
 CC inozymes, zinzymes, amberszymes, and G-cleaver ribozymes. Also disclosed  
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
 CC DNA. The nucleic acids may be used to modulate the expression of HBV  
 CC genes and HBV viral replication. Also disclosed is a method for screening  
 CC compounds and/or potential therapies directed against HBV, and compounds  
 CC that modulate the expression and/or replication of HCV. The compounds and  
 CC methods of the invention are useful for the treatment of degenerative and  
 CC disease states related to HBV and HCV infection, replication and gene  
 CC expression such as cirrhosis, liver failure, and hepatocellular  
 CC carcinoma. The present sequence represents a substrate for one of the HCV  
 CC DNazyme or minus strand DNazyme sequences disclosed in the present  
 CC invention  
 XX  
 SQ Sequence 17 BP; 1 A; 7 C; 7 G; 0 T; 2 U; 0 Other;  
 Query Match 3.0%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 80.0%; Pred. No. 3.6e+02;  
 Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;  
 QY 210 ACCTGCGCGGGGTGCG 224  
 DB 2 ACCUGCGCGGCGUCG 16  
 |||:|||||:|  
 |||:|||||:|  
 RESULT 360  
 ADI48631/c  
 ID ADI48631 standard; DNA; 17 BP.  
 XX  
 AC ADI48631;  
 XX  
 DT 15-APR-2004 (first entry)  
 XX  
 DE Human tumour suppression/reversion-related DNA sequence SeqID1134.  
 XX  
 KW tumour suppression; tumour reversion; apoptosis; virus resistance;  
 KW cytosstatic; virucide; neuroprotective; nootropic; neuroleptic; probe;  
 KW primer; PCR; gene chip; antisense; viral disease; tumour;  
 KW cell degeneration; cancer; Alzheimer's disease; schizophrenia; ds; human.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO2003025177-A2.  
 XX  
 PD 27-MAR-2003.  
 XX  
 PF 17-SEP-2002; 2002WO-IB004523.

PR 17-SEP-2001; 2001FR-00011980.  
 XX (MOLE-) MOLECULAR ENGINES LAB.  
 XX  
 PI Telerman A, Amson R, Tuijnder M;  
 XX  
 XX WPI; 2003-313354/30.  
 XX  
 PT New isolated nucleic acid, useful for treating viral diseases associated  
 PT with tumors and cell degeneration, also related polypeptides, antibodies  
 PT and transfected cells.  
 XX  
 XX Disclosure; SEQ ID NO 1134; 30pp; French.  
 PS  
 XX This invention relates to novel isolated nucleic acid sequences involved  
 CC in the phenomena of tumour suppression, tumour reversion, apoptosis  
 CC and/or resistance to viruses. The invention may be useful for the  
 CC development of compounds with a cytostatic, virucide, neuroprotective,  
 CC nootropic or neuroleptic activity. The DNA sequences may be useful as  
 CC probes and primers for detecting, identifying, quantifying and/or  
 CC amplifying nucleic acid, for example as one component of a gene chip, in  
 CC vitro as antisense reagents and for production of recombinant  
 CC polypeptides. The invention may therefore be useful for preparation of  
 CC pharmaceuticals for prevention and/or treatment of viral diseases that  
 CC are characterised by development of tumours or cell degeneration,  
 CC specifically cancer but also Alzheimer's disease and schizophrenia. The  
 CC present sequence is that of a nucleic acid sequence of the invention.  
 CC Note: The sequence data for this patent did not form part of the printed  
 CC specification, but was obtained in electronic format directly from WIPO  
 CC at ftp.wipo.int/pub/publishedpct\_sequences  
 XX  
 SQ Sequence 17 BP; 8 A; 3 C; 5 G; 1 T; 0 U; 0 Other;  
 Query Match 3.0%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 3.6e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 QY 97 TGTTCCTCGCTGA 111  
 DB 17 TGTTCCTCGCTGA 3  
 ||||| |||||  
 ||||| |||||  
 RESULT 361  
 ADM54545/c  
 ID ADM54545 standard; mRNA; 17 BP.  
 XX  
 AC ADM54545;  
 XX  
 DT 03-JUN-2004 (first entry)  
 XX  
 DE Human GRID mRNA substrate sequence #855.  
 XX  
 KW Human; ss; GRID; Grb2-related with insert domain; hammerhead ribozyme;  
 KW NCH ribozyme; G-cleaver ribozyme; zinzyme; DNazyme; amberszyme; Inozyme;  
 KW hairpin ribozyme; tissue rejection; graft rejection; leukaemia.  
 XX  
 OS Homo sapiens.  
 XX  
 PN US2003134806-A1.  
 XX  
 PD 17-JUL-2003.  
 XX  
 PF 23-FEB-2001; 2001US-00792818.  
 XX  
 PR 10-FEB-2000; 2000US-0181594P.  
 XX  
 XX (JARV//) JARVIS T.  
 PA (CARL//) CARLOWITZ I V.  
 PA (MCSW//) MCSWIGGEN J.  
 PA (HAMB//) HAMBLIN P A.  
 PA (ELLI//) ELLIS J H.  
 XX  
 PI Jarvis T, Carlowitz IV, Mcswiggen J, Hamblin PA, Ellis JH;

XX WPI; 2003-829646/77.  
 XX  
 XX New nucleic acid molecule that down-regulates expression of Grb2-related  
 PT with insert domain (GRID) gene, useful for treating a condition  
 PT associated with the level of GRID, e.g. tissue/graft rejection and  
 PT leukemia.  
 XX  
 XX Claim 4; SEQ ID NO 857; 74pp; English.  
 XX  
 CC The invention relates to a nucleic acid molecule that down-regulates  
 CC expression of Grb2-related with insert domain (GRID) gene, e.g. a  
 CC hammerhead ribozyme, NCH ribozyme, G-cleaver ribozyme, Zinzyme, DNzyme,  
 CC amberyzyme, inozyme or hairpin ribozyme. Also include are a mammalian cell  
 CC including the novel nucleic acid molecule, reducing GRID activity in a  
 CC cell by contacting the cell with the novel nucleic acid molecule,  
 CC treating a patient having a condition associated with the level of GRID  
 CC (e.g. tissue/graft rejection or leukaemia) by contacting the cell with  
 CC the novel nucleic acid molecule, cleaving RNA of a GRID gene by  
 CC contacting the cell with the novel nucleic acid molecule, an expression  
 CC vector comprising a nucleic acid sequences (encoding at least the novel  
 CC nucleic acid molecule in a manner that allows its expression), a  
 CC mammalian cell including the expression vector and an enzymatic nucleic  
 CC acid molecule that cleaves RNA derived from a GRID gene. The nucleic acid  
 CC molecule is useful for treating a condition associated with the level of  
 CC GRID, e.g. tissue/graft rejection and leukaemia. The present sequence is  
 CC a target region for the enzymatic nucleic acids of the invention.  
 XX  
 XX Sequence 17 BP; 3 A; 3 C; 10 G; 0 T; 1 U; 0 Other;  
 SQ

Query Match 3.0%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. NO. 3.6e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 132 CTCGGCCTGCGCGCT 146  
 Db 15 CTCGGCCTGCGCGCT 1

RESULT 362  
 ADI86392/c  
 ID ADI86392 standard; RNA; 17 BP.  
 XX  
 XX ADI86392;  
 AC  
 XX  
 XX 03-JUN-2004 (first entry)  
 DT  
 XX  
 DE HCV DNzyme substrate sequence #3638.  
 KW  
 KW ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;  
 KW HCV infection; type I interferon; DNzyme.  
 XX  
 XX Hepatitis C virus.  
 OS  
 XX  
 XX US2003125270-A1.  
 PN  
 XX  
 XX 03-JUL-2003.  
 PD  
 XX  
 XX 18-DEC-2000; 2000US-00740332.  
 PF  
 XX  
 XX 18-DEC-2000; 2000US-00740332.  
 PR  
 XX  
 XX (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (ROBE/) ROBERTS E.  
 PA (PAVC/) PAVCO P A.  
 PA (MACE/) MACEJACK D.  
 XX  
 XX Blatt L, Mcswiggen J, Roberts E, Pavco PA, Macejack D;  
 PI  
 XX WPI; 2004-031273/03.  
 DR  
 XX Enzymatic nucleic acid molecules which specifically cleave RNA derived

PT from hepatitis C virus (HCV), useful for the treatment of HCV infections,  
 PT especially in combination with type I interferon therapy.  
 XX  
 XX Claim 1; SEQ ID NO 3638; 198pp; English.  
 PS  
 XX The invention relates to an enzymatic nucleic acid molecule which  
 CC specifically cleaves RNA derived from hepatitis C virus (HCV), in which  
 CC the binding arms of the enzymatic nucleic acid molecule comprises  
 CC sequences complementary to any of the defined substrate sequences given  
 CC in the specification. The nucleic acid molecule may be administered for  
 CC the treatment of HCV infections, especially in combination with type I  
 CC interferons. The present sequence represents a HCV DNzyme substrate  
 CC sequence.  
 XX  
 XX Sequence 17 BP; 2 A; 7 C; 6 G; 0 T; 2 U; 0 Other;  
 SQ

Query Match 3.0%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. NO. 3.6e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 210 ACCTGCGGCGGTCG 224  
 Db 17 ACCTGCGGCGGTCG 3

RESULT 363  
 AAT89228/c  
 ID AAT89228 standard; DNA; 13 BP.  
 XX  
 XX AAT89228;  
 AC  
 XX  
 XX 21-OCT-2004 (revised)  
 DT  
 XX 12-MAY-1998 (first entry)  
 DT  
 XX  
 DE Peptide nucleic acid 4, targeted to mammalian telomerase.  
 DE  
 XX Peptide nucleic acid; PNA; cancer; telomerase; probe; hybridisation;  
 KW inhibitor; ss.  
 KW  
 XX Synthetic.  
 OS  
 XX  
 XX Key Location/Qualifiers  
 PH modified\_base 1..13  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "Sugar-phosphate backbone has been replaced by a  
 FT peptide backbone"  
 FT  
 XX  
 XX WO9738013-A1.  
 PN  
 XX  
 XX 16-OCT-1997.  
 PD  
 XX  
 XX 09-APR-1997; 97WO-US005931.  
 PF  
 XX  
 XX 09-APR-1996; 96US-00630019.  
 PR  
 XX  
 XX (GERO-) GERON CORP.  
 PA  
 XX  
 XX Shay JW, Wright WE, Piatyszek MA, Corey D, Norton JC;  
 PI  
 XX WPI; 1997-512647/47.  
 DR  
 XX  
 XX New peptide nucleic acids hybridising to mammalian telomerase RNA - used  
 PT to inhibit telomerase, for treating tumours and other proliferative  
 PT diseases, also for diagnosis.  
 PT  
 XX  
 XX Claim 9; Page 59; 76pp; English.  
 PS  
 XX This sequence is a novel peptide nucleic acid (PNA), which acts as an  
 CC inhibitor of mammalian, preferably human, telomerase. The PNAs hybridise  
 CC specifically to an RNA component of mammalian telomerase, and include the  
 CC sequence GGG for specific hybridisation to the template region of this  
 CC component. PNAs can be used as probes to detect the RNA component of



CC mammalian telomerase and as inhibitors of telomerase activity, especially  
CC in the treatment of cancer

CC Revised record issued on 21-OCT-2004 : Correction to feature table key

CC Sequence 13 BP; 5 A; 1 C; 4 G; 3 T; 0 U; 0 Other;

CC Query Match 2.9%; Score 13; DB 1; Length 13;

CC Best Local Similarity 100.0%; Pred. No. 2.8e+02;

CC Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

CC 42 TTGCTACCTTA 54

CC 13 TTGCTACCTTA 1

CC RESULT 364

CC AAT89236/C

CC ID AAT89236 standard; DNA; 13 BP.

CC XX AC AAT89236;

CC XX DT 21-OCT-2004 (revised)

CC XX DT 12-MAY-1998 (first entry)

CC XX DE Peptide nucleic acid 11, targeted to mammalian telomerase.

CC XX KW Peptide nucleic acid; PNA; cancer; telomerase; probe; hybridisation;

CC XX KW inhibitor; ss.

CC XX OS Synthetic.

CC XX FH Key Location/Qualifiers

CC XX FT modified\_base 1..13

CC XX FT /\*tag= a

CC XX FT /mod\_base= OTHER

CC XX FT /note= "Sugar-phosphate backbone has been replaced by a

CC XX FT peptide backbone"

CC XX PN WO9738013-A1.

CC XX PD 16-OCT-1997.

CC XX PF 09-APR-1997; 97WO-US005931.

CC XX PR 09-APR-1996; 96US-00630019.

CC XX XX (GERO-) GERON CORP.

CC XX PI Shay JW, Wright WE, Piatyszek MA, Corey D, Norton JC;

CC XX DR WPI; 1997-512647/47.

CC XX PT New peptide nucleic acids hybridising to mammalian telomerase RNA - used

CC XX PT to inhibit telomerase, for treating tumours and other proliferative

CC XX PT diseases, also for diagnosis.

CC XX PS Claim 9; Page 59; 76pp; English.

CC XX This sequence is a novel peptide nucleic acid (PNA), which acts as an  
CC inhibitor of mammalian, preferably human, telomerase. The PNAs hybridise  
CC specifically to an RNA component of mammalian telomerase, and include the  
CC sequence GGG for specific hybridisation to the template region of this  
CC component. PNAs can be used as probes to detect the RNA component of  
CC mammalian telomerase and as inhibitors of telomerase activity, especially  
CC in the treatment of cancer

CC Revised record issued on 21-OCT-2004 : Correction to feature table key

CC Sequence 13 BP; 3 A; 1 C; 5 G; 4 T; 0 U; 0 Other;

CC Query Match 2.9%; Score 13; DB 1; Length 13;

CC Best Local Similarity 100.0%; Pred. No. 2.8e+02;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 44 GTCTAACCTTAAC 56

Db 13 GTCTAACCTTAAC 1

CC RESULT 365

CC AAT89225/C

CC ID AAT89225 standard; DNA; 13 BP.

CC XX AC AAT89225;

CC XX DT 21-OCT-2004 (revised)

CC XX DT 12-MAY-1998 (first entry)

CC XX DE Peptide nucleic acid 1, targeted to mammalian telomerase.

CC XX KW Peptide nucleic acid; PNA; cancer; telomerase; probe; hybridisation;

CC XX KW inhibitor; ss.

CC XX OS Synthetic.

CC XX FH Key Location/Qualifiers

CC XX FT modified\_base 1..13

CC XX FT /\*tag= a

CC XX FT /mod\_base= OTHER

CC XX FT /note= "Sugar-phosphate backbone has been replaced by a

CC XX FT peptide backbone"

CC XX PN WO9738013-A1.

CC XX PD 16-OCT-1997.

CC XX PF 09-APR-1997; 97WO-US005931.

CC XX PR 09-APR-1996; 96US-00630019.

CC XX XX (GERO-) GERON CORP.

CC XX PI Shay JW, Wright WE, Piatyszek MA, Corey D, Norton JC;

CC XX DR WPI; 1997-512647/47.

CC XX PT New peptide nucleic acids hybridising to mammalian telomerase RNA - used  
CC XX PT to inhibit telomerase, for treating tumours and other proliferative  
CC XX PT diseases, also for diagnosis.

CC XX PS Claim 9; Page 59; 76pp; English.

CC XX This sequence is a novel peptide nucleic acid (PNA), which acts as an  
CC inhibitor of mammalian, preferably human, telomerase. The PNAs hybridise  
CC specifically to an RNA component of mammalian telomerase, and include the  
CC sequence GGG for specific hybridisation to the template region of this  
CC component. PNAs can be used as probes to detect the RNA component of  
CC mammalian telomerase and as inhibitors of telomerase activity, especially  
CC in the treatment of cancer

CC Revised record issued on 21-OCT-2004 : Correction to feature table key

CC Sequence 13 BP; 3 A; 1 C; 5 G; 4 T; 0 U; 0 Other;

CC Query Match 2.9%; Score 13; DB 1; Length 13;

CC Best Local Similarity 100.0%; Pred. No. 2.8e+02;

CC Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 46 CTAACCTTAACCTG 58

Db 13 CTAACCTTAACCTG 1

CC RESULT 366

CC AAZ08815/C

```

ID AAZ08815 standard; DNA; 13 BP.
XX AC
XX AAZ08815;
XX DT
XX 01-NOV-1999 (first entry)
XX DE Human RERF-LC-A1 hybridisable oligonucleotide.
XX KW Human RERF-LC-A1; hybridisation; antitumour augmenting drug; telomerase;
XX KW cancer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN JP11228451-A.
XX PD 24-AUG-1999.
XX PF 10-FEB-1998; 98JP-00044686.
XX PR 10-FEB-1998; 98JP-00044686.
XX PA (KURE ) KUREHA CHEM IND CO LTD.
XX DR WPI; 1999-522625/44.
XX PT New composition - for anti-tumor augmenting agent.
XX PS Example 1; Page 6; 8pp; Japanese.
XX CC The present invention describes an antitumour augmenting agent comprising
CC a hybridisable oligonucleotide, as an effective component, contained at
CC the template region of RNA site contained in telomerase. Also described
CC is an antitumour composition comprising the antitumour augmenting agent
CC and an antitumour agent as effective components. The present sequence
CC represents a hybridisable oligonucleotide for human RERF-LC-A1, used in
CC the exemplification of the present invention. When the antitumour
CC composition is administered into a mammal, especially human, a
CC sufficient antitumour effect is exhibited to cancer cells
XX SQ Sequence 13 BP; 5 A; 1 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 42 TTGCTTAACCCCTA 54
Db 13 TTGCTTAACCCCTA 1
RESULT 367
AAA37544/c
ID AAA37544 standard; DNA; 13 BP.
XX AC
XX AAA37544;
XX DT 15-AUG-2000 (first entry)
XX DE PNA sequence #1 used to inhibit telomerase activity.
XX KW Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;
XX KW inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;
XX KW AIDS; HIV; fungal infection; forensic identification; detect; tumour;
XX KW paternity testing; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT misc_feature 1..13
XX FT /*tag= a
XX FT /note= "Peptide nucleic acid molecule, where N-(2-
XX FT aminoethyl)glycine units are linked to nucleotide bases
via glycine amino N through a methylenecarbonyl linker"
FT US6046307-A.
XX PN
XX 04-APR-2000.
XX PD
XX 09-APR-1997; 97US-00838545.
XX PF
XX 09-APR-1996; 96US-00630019.
XX PR
XX (TEXA ) UNIV TEXAS SYSTEM.
XX PA
XX Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;
XX PI WPI; 2000-292432/25.
XX DR
XX New peptide nucleic acid (PNA) compounds that inhibit telomerase activity
XX PT in mammalian cells is useful as probes to detect the RNA component of a
XX PF mammalian telomerase.
XX PR
XX Claim 6; Col 71; 45pp; English.
XX PS
XX The present sequence represents a peptide nucleic acid molecule which
XX CC hybridises to the mRNA component of mammalian telomerase, and inhibits
XX CC telomerase activity. Telomerase is a ribonucleoprotein enzyme that
XX CC synthesizes one strand of the telomeric DNA, using as a template an 11
XX CC nucleotide sequence contained within the RNA component of the enzyme. The
XX CC invention relates to PNA molecules having a sequence of no more than 25
XX CC bases, which include the sequence GTTAGG. The uncharged nature of the PNA
XX CC backbone increases the melting temperature of associating strands,
XX CC increases the rate of association with targeted nucleic acids, and
XX CC affords greater resistance of degradation by proteases or nucleases. The
XX CC therapeutic PNAs may be used for treating disease conditions such as
XX CC cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human
XX CC immunodeficiency virus (HIV) infection/AIDS (acquired immunodeficiency
XX CC syndrome) and associated pathologies, fungal infections, and other
XX CC diseases characterized by abnormal telomere metabolism or telomerase
XX CC activity, in combination with antineoplastic and other cytotoxic or
XX CC cytostatic agents, antifungal agents, and other nucleotides. PNAs may be
XX CC used for molecular diagnostics, labelled PNAs are used as hybridization
XX CC probes to detect or quantitate polynucleotides having a human telomerase
XX CC RNA (hTR) sequence. PNA probes are also used for forensic identification
XX CC of individuals, e.g. paternity testing, based on hTR gene restriction
XX CC fragment length polymorphism (RFLP) pattern. PNAs are also useful as
XX CC probes to detect the RNA component of a mammalian telomerase and as
XX CC inhibitors of telomerase activity. The method of the present invention
XX CC allows cancerous conditions to be detected with increased confidence and
XX CC possibly at an earlier stage, before cells are detected as cancerous
XX CC based on pathological characteristics. The diagnostic and prognostic
XX CC methods of the present invention can be used to detect an immortal or
XX CC neoplastic cell or tumour tissue or cancer of any origin, provided the
XX CC cell expresses telomerase activity and its RNA component
XX SQ Sequence 13 BP; 3 A; 1 C; 5 G; 4 T; 0 U; 0 Other;
Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 46 CTAAACCCCTAACCTG 58
Db 13 CTAAACCCCTAACCTG 1
RESULT 368
AAA37594/c
ID AAA37594 standard; DNA; 13 BP.
XX AC
XX AAA37594;
XX DT 15-AUG-2000 (first entry)
XX DE PNA sequence #52 used to inhibit telomerase activity.

```

XX Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;  
 KW inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;  
 KW AIDS; HIV; fungal infection; forensic identification; detect; tumour;  
 KW paternity testing; ss.  
 OS Synthetic.  
 XX  
 XX  
 FH Key Location/Qualifiers  
 FT misc\_feature 1. .13  
 FT /tag= a  
 FT /note= "Peptide nucleic acid molecule, where N-(2-  
 FT aminoethyl)glycine units are linked to nucleotide bases  
 FT via glycine amino N through a methylenecarbonyl linker"  
 XX  
 PN US6046307-A.  
 XX  
 XX 04-APR-2000.  
 XX  
 XX 09-APR-1997; 97US-00838545.  
 XX  
 XX 09-APR-1996; 96US-00630019.  
 XX  
 XX (TEXA ) UNIV TEXAS SYSTEM.  
 XX  
 XX Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;  
 XX WPI; 2000-292432/25.  
 XX  
 XX New peptide nucleic acid (PNA) compounds that inhibit telomerase activity  
 PT in mammalian cells is useful as probes to detect the RNA component of a  
 PT mammalian telomerase.  
 XX  
 XX Example 2; Col 37; 45pp; English.  
 XX  
 XX The present sequence represents a peptide nucleic acid molecule which  
 CC hybridises to the mRNA component of mammalian telomerase, and inhibits  
 CC telomerase activity. Telomerase is a ribonucleoprotein enzyme that  
 CC synthesizes one strand of the telomeric DNA, using as a template an 11  
 CC nucleotide sequence contained within the RNA component of the enzyme. The  
 CC invention relates to PNA molecules having a sequence of no more than 25  
 CC bases, which include the sequence GTTAGG. The uncharged nature of the PNA  
 CC backbone increases the melting temperature of associating strands, and  
 CC increases the rate of association with targeted nucleic acids, and  
 CC affords greater resistance of degradation by proteases or nucleases. The  
 CC therapeutic PNAs may be used for treating disease conditions such as  
 CC cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human  
 CC immunodeficiency virus (HIV) infection/AIDS (acquired immunodeficiency  
 CC syndrome) and associated pathologies, fungal infections, and other  
 CC diseases characterized by abnormal telomere metabolism or telomerase  
 CC activity, in combination with antineoplastic and other cytotoxic or  
 CC cytostatic agents, antifungal agents, and other nucleotides. PNAs may be  
 CC used for molecular diagnostics, labelled PNAs are used as hybridization  
 CC probes to detect or quantitate polynucleotides having a human telomerase  
 CC RNA (hTR) sequence. PNA probes are also used for forensic identification  
 CC of individuals, e.g. paternity testing, based on hTR gene restriction  
 CC fragment length polymorphism (RFLP) pattern. PNAs are also useful as  
 CC probes to detect the RNA component of a mammalian telomerase and as  
 CC inhibitors of telomerase activity. The method of the present invention  
 CC allows cancerous conditions to be detected with increased confidence and  
 CC possibly at an earlier stage, before cells are detected as cancerous  
 CC based on pathological characteristics. The diagnostic and prognostic  
 CC methods of the present invention can be used to detect an immortal or  
 CC neoplastic cell or tumour tissue or cancer of any origin, provided the  
 CC cell expresses telomerase activity and its RNA component  
 XX  
 XX Sequence 13 BP; 7 A; 1 C; 3 G; 2 T; 0 U; 0 Other;  
 Query Match 2.9%; Score 13; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 . 39 TTTTGTGCTAACC 51

Db 13 TTTTGTGCTAACC 1  
 RESULT 369  
 AAA37598/C  
 ID AAA37598 standard; DNA; 13 BP.  
 XX  
 AC AAA37598;  
 XX  
 DT 15-AUG-2000 (first entry)  
 XX  
 DE PNA sequence #56 used to inhibit telomerase activity.  
 XX  
 KW Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;  
 KW inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;  
 KW AIDS; HIV; fungal infection; forensic identification; detect; tumour;  
 KW paternity testing; ss.  
 XX  
 OS Synthetic.  
 XX  
 FH Key Location/Qualifiers  
 FT misc\_feature 1. .13  
 FT /tag= a  
 FT /note= "Peptide nucleic acid molecule, where N-(2-  
 FT aminoethyl)glycine units are linked to nucleotide bases  
 FT via glycine amino N through a methylenecarbonyl linker"  
 XX  
 PN US6046307-A.  
 XX  
 XX 04-APR-2000.  
 XX  
 XX 09-APR-1997; 97US-00838545.  
 XX  
 XX 09-APR-1996; 96US-00630019.  
 XX  
 XX (TEXA ) UNIV TEXAS SYSTEM.  
 XX  
 XX Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;  
 XX WPI; 2000-292432/25.  
 XX  
 XX New peptide nucleic acid (PNA) compounds that inhibit telomerase activity  
 PT in mammalian cells is useful as probes to detect the RNA component of a  
 PT mammalian telomerase.  
 XX  
 XX Example 2; Col 37; 45pp; English.  
 XX  
 XX The present sequence represents a peptide nucleic acid molecule which  
 CC hybridises to the mRNA component of mammalian telomerase, and inhibits  
 CC telomerase activity. Telomerase is a ribonucleoprotein enzyme that  
 CC synthesizes one strand of the telomeric DNA, using as a template an 11  
 CC nucleotide sequence contained within the RNA component of the enzyme. The  
 CC invention relates to PNA molecules having a sequence of no more than 25  
 CC bases, which include the sequence GTTAGG. The uncharged nature of the PNA  
 CC backbone increases the melting temperature of associating strands, and  
 CC increases the rate of association with targeted nucleic acids, and  
 CC affords greater resistance of degradation by proteases or nucleases. The  
 CC therapeutic PNAs may be used for treating disease conditions such as  
 CC cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human  
 CC immunodeficiency virus (HIV) infection/AIDS (acquired immunodeficiency  
 CC syndrome) and associated pathologies, fungal infections, and other  
 CC diseases characterized by abnormal telomere metabolism or telomerase  
 CC activity, in combination with antineoplastic and other cytotoxic or  
 CC cytostatic agents, antifungal agents, and other nucleotides. PNAs may be  
 CC used for molecular diagnostics, labelled PNAs are used as hybridization  
 CC probes to detect or quantitate polynucleotides having a human telomerase  
 CC RNA (hTR) sequence. PNA probes are also used for forensic identification  
 CC of individuals, e.g. paternity testing, based on hTR gene restriction  
 CC fragment length polymorphism (RFLP) pattern. PNAs are also useful as  
 CC probes to detect the RNA component of a mammalian telomerase and as  
 CC inhibitors of telomerase activity. The method of the present invention  
 CC allows cancerous conditions to be detected with increased confidence and

CC possibly at an earlier stage, before cells are detected as cancerous  
CC based on pathological characteristics. The diagnostic and prognostic  
CC methods of the present invention can be used to detect an immortal or  
CC neoplastic cell or tumour tissue or cancer of any origin, provided the  
CC cell expresses telomerase activity and its RNA component  
XX  
SQ Sequence 13 BP; 1 A; 6 C; 2 G; 4 T; 0 U; 0 Other;  
Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 55 ACTGAGAAGCGCG 67  
Db 13 ACTGAGAAGCGCG 1  
RESULT 370  
AAA37593/C  
ID AAA37593 standard; DNA; 13 BP.  
XX AC AAA37593;  
XX 15-AUG-2000 (first entry)  
XX PNA sequence #51 used to inhibit telomerase activity.  
DE Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;  
KW inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;  
KW AIDS; HIV; fungal infection; forensic identification; detect; tumour;  
KW paternity testing; ss.  
XX Synthetic.  
OS  
PH Key Location/Qualifiers  
FT misc\_feature 1..13  
FT /note= "Peptide nucleic acid molecule, where N-(2-  
FT aminoethyl)glycine units are linked to nucleotide bases  
FT via glycine amino N through a methylenecarbonyl linker"  
FT  
FT  
FT  
FT  
PN US6046307-A.  
XX 04-APR-2000.  
XX 09-APR-1997; 97US-00838545.  
XX 09-APR-1996; 96US-00630019.  
XX (TEXA ) UNIV TEXAS SYSTEM.  
XX Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;  
XX WPI; 2000-292432/25.  
XX New peptide nucleic acid (PNA) compounds that inhibit telomerase activity  
XX in mammalian cells is useful as probes to detect the RNA component of a  
XX mammalian telomerase.  
PS Example 2; Col 37; 45pp; English.  
XX The present sequence represents a peptide nucleic acid molecule which  
XX hybridises to the mRNA component of mammalian telomerase, and inhibits  
XX telomerase activity. Telomerase is a ribonucleoprotein enzyme that  
XX synthesizes one strand of the telomeric DNA, using as a template an 11  
XX nucleotide sequence contained within the RNA component of the enzyme. The  
XX invention relates to PNA molecules having a sequence of no more than 25  
XX bases, which include the sequence GTTAGG. The uncharged nature of the PNA  
XX backbone increases the melting temperature of associating strands,  
XX increases the rate of association with targeted nucleic acids, and  
XX affords greater resistance of degradation by proteases or nucleases. The  
XX therapeutic PNAs may be used for treating disease conditions such as  
XX cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human

CC immunodeficiency virus (HIV) infection/AIDS (acquired immunodeficiency  
CC syndrome) and associated pathologies, fungal infections, and other  
CC diseases characterized by abnormal telomere metabolism or telomerase  
CC activity, in combination with antineoplastic and other cytotoxic or  
CC cytostatic agents, antifungal agents, and other nucleotides. PNAs may be  
CC used for molecular diagnostics, labelled PNAs are used as hybridization  
CC probes to detect or quantitate polynucleotides having a human telomerase  
CC RNA (hTR) sequence. PNA probes are also used for forensic identification  
CC of individuals, e.g. paternity testing, based on hTR gene restriction  
CC fragment length polymorphism (RFLP) pattern. PNAs are also useful as  
CC probes to detect the RNA component of a mammalian telomerase and as  
CC inhibitors of telomerase activity. The method of the present invention  
CC allows cancerous conditions to be detected with increased confidence and  
CC possibly at an earlier stage, before cells are detected as cancerous  
CC based on pathological characteristics. The diagnostic and prognostic  
CC methods of the present invention can be used to detect an immortal or  
CC neoplastic cell or tumour tissue or cancer of any origin, provided the  
CC cell expresses telomerase activity and its RNA component  
XX  
SQ Sequence 13 BP; 8 A; 1 C; 2 G; 2 T; 0 U; 0 Other;  
Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 38 TTTTGTGCTTAAC 50  
Db 13 TTTTGTGCTTAAC 1  
RESULT 371  
AAA37588/C  
ID AAA37588 standard; DNA; 13 BP.  
XX AC AAA37588;  
XX 15-AUG-2000 (first entry)  
XX Antisense sequence #46 used to inhibit telomerase activity.  
DE Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;  
KW inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;  
KW AIDS; HIV; fungal infection; forensic identification; detect; tumour;  
KW paternity testing; ss.  
XX Synthetic.  
OS  
PH Key Location/Qualifiers  
FT misc\_feature 1..13  
FT /tag= a  
FT /note= "Phosphorothioate internucleotide linkages"  
FT  
FT  
PN US6046307-A.  
XX 04-APR-2000.  
XX 09-APR-1997; 97US-00838545.  
XX 09-APR-1996; 96US-00630019.  
XX (TEXA ) UNIV TEXAS SYSTEM.  
XX Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;  
XX WPI; 2000-292432/25.  
XX New peptide nucleic acid (PNA) compounds that inhibit telomerase activity  
XX in mammalian cells is useful as probes to detect the RNA component of a  
XX mammalian telomerase.  
PS Example 1; Col 27-28; 45pp; English.  
XX The present sequence represents an antisense oligonucleotide used as a

CC control sequence alongside a peptide nucleic acid molecule which  
CC hybridises to the mRNA component of mammalian telomerase, and inhibits  
CC telomerase activity. Telomerase is a ribonucleoprotein enzyme that  
CC synthesizes one strand of the telomeric DNA, using as a template an 11  
CC nucleotide sequence contained within the RNA component of the enzyme. The  
CC invention relates to PNA molecules having a sequence of no more than 25  
CC bases, which include the sequence GTTAGG. The uncharged nature of the PNA  
CC backbone increases the melting temperature of associating strands,  
CC increases the rate of association with targeted nucleic acids, and  
CC affords greater resistance of degradation by proteases or nucleases. The  
CC therapeutic PNAs may be used for treating disease conditions such as  
CC cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human  
CC immunodeficiency virus (HIV) infection/AIDS (acquired immunodeficiency  
CC syndrome) and associated pathologies, fungal infections, and other  
CC diseases characterized by abnormal telomere metabolism or telomerase  
CC activity, in combination with antineoplastic and other cytotoxic or  
CC cytostatic agents, antifungal agents, and other nucleotides. PNAs may be  
CC used for molecular diagnostics, labelled PNAs are used as hybridization  
CC probes to detect or quantitate polynucleotides having a human telomerase  
CC RNA (hTR) sequence. PNA probes are also used for forensic identification  
CC of individuals, e.g. paternity testing, based on hTR gene restriction  
CC fragment length polymorphism (RFLP) pattern. PNAs are also useful as  
CC probes to detect the RNA component of a mammalian telomerase and as  
CC inhibitors of telomerase activity. The method of the present invention  
CC allows cancerous conditions to be detected with increased confidence and  
CC possibly at an earlier stage, before cells are detected as cancerous  
CC based on pathological characteristics. The diagnostic and prognostic  
CC methods of the present invention can be used to detect an immortal or  
CC neoplastic cell or tumour tissue or cancer of any origin, provided the  
CC cell expresses telomerase activity and its RNA component

XX Sequence 13 BP; 5 A; 1 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGCTAACCTTA 54  
Db 13 TTGCTAACCTTA 1

RESULT 372  
AAA37597/C  
ID AAA37597 standard; DNA; 13 BP.

XX AAA37597;  
XX 15-AUG-2000 (first entry)  
XX PNA sequence #55 used to inhibit telomerase activity.

XX Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;  
KW inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;  
KW AIDS; HIV; fungal infection; forensic identification; detect; tumour;  
KW paternity testing; ss.

XX Synthetic.

XX Key Location/Qualifiers  
FT misc\_feature 1..13

FT /tag= a  
FT /note= "Peptide nucleic acid molecule, where N-(2-  
FT aminoethyl)glycine units are linked to nucleotide bases  
FT via glycine amino N through a methylenecarbonyl linker"

XX US6046307-A.

XX 04-APR-2000.

XX 09-APR-1997; 97US-00838545.

XX 09-APR-1996; 96US-00630019.

XX (TEXA ) UNIV TEXAS SYSTEM.  
PA Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;  
XX WPI; 2000-292432/25.

XX New peptide nucleic acid (PNA) compounds that inhibit telomerase activity  
PT in mammalian cells is useful as probes to detect the RNA component of a  
PT mammalian telomerase.

XX Example 2; Col 37; 45pp; English.

XX The present sequence represents a peptide nucleic acid molecule which  
CC hybridises to the mRNA component of mammalian telomerase, and inhibits  
CC telomerase activity. Telomerase is a ribonucleoprotein enzyme that  
CC synthesizes one strand of the telomeric DNA, using as a template an 11  
CC nucleotide sequence contained within the RNA component of the enzyme. The  
CC invention relates to PNA molecules having a sequence of no more than 25  
CC bases, which include the sequence GTTAGG. The uncharged nature of the PNA  
CC backbone increases the melting temperature of associating strands, and  
CC increases the rate of association with targeted nucleic acids, and  
CC affords greater resistance of degradation by proteases or nucleases. The  
CC therapeutic PNAs may be used for treating disease conditions such as  
CC cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human  
CC immunodeficiency virus (HIV) infection/AIDS (acquired immunodeficiency  
CC syndrome) and associated pathologies, fungal infections, and other  
CC diseases characterized by abnormal telomere metabolism or telomerase  
CC activity, in combination with antineoplastic and other cytotoxic or  
CC cytostatic agents, antifungal agents, and other nucleotides. PNAs may be  
CC used for molecular diagnostics, labelled PNAs are used as hybridization  
CC probes to detect or quantitate polynucleotides having a human telomerase  
CC RNA (hTR) sequence. PNA probes are also used for forensic identification  
CC of individuals, e.g. paternity testing, based on hTR gene restriction  
CC fragment length polymorphism (RFLP) pattern. PNAs are also useful as  
CC probes to detect the RNA component of a mammalian telomerase and as  
CC inhibitors of telomerase activity. The method of the present invention  
CC allows cancerous conditions to be detected with increased confidence and  
CC possibly at an earlier stage, before cells are detected as cancerous  
CC based on pathological characteristics. The diagnostic and prognostic  
CC methods of the present invention can be used to detect an immortal or  
CC neoplastic cell or tumour tissue or cancer of any origin, provided the  
CC cell expresses telomerase activity and its RNA component

XX Sequence 13 BP; 2 A; 5 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 53 TAACTGAGAGGG 65  
Db 13 TAACTGAGAGGG 1

RESULT 373  
AAA37555/C  
ID AAA37555 standard; DNA; 13 BP.

XX AAA37555;

XX 15-AUG-2000 (first entry)

XX PNA sequence #12 used to inhibit telomerase activity.

XX Peptide nucleic acid; PNA; telomerase; ribonucleoprotein enzyme; cancer;  
KW inhibitor; neoplasia; neurodegenerative disease; aging; hyperplasia;  
KW AIDS; HIV; fungal infection; forensic identification; detect; tumour;  
KW paternity testing; ss.

XX Synthetic.

XX Key Location/Qualifiers

FT	misc_feature	1..13
FT	/tag=	a
FT	/note=	"Peptide nucleic acid molecule, where N-(2-aminoethyl)glycine units are linked to nucleotide bases via glycine amino N through a methylenecarbonyl linker"
XX		
PN	US6046307-A.	
XX		
PD	04-APR-2000.	
XX		
PP	09-APR-1997;	97US-00838545.
XX		
PR	09-APR-1996;	96US-00630019.
XX	(TEXA ) UNIV TEXAS SYSTEM.	
PA		
XX		
PI	Wright WE, Piatyszek MA, Shay JW, Norton JC, Corey DR;	
XX		
DR	WPI; 2000-292432/25.	
XX		
PT	New peptide nucleic acid (PNA) compounds that inhibit telomerase activity in mammalian cells is useful as probes to detect the RNA component of a mammalian telomerase.	
PT		
XX		
PS	Claim 6; Col 71; 45pp; English.	
XX		
CC	The present sequence represents a peptide nucleic acid molecule which hybridises to the mRNA component of mammalian telomerase, and inhibits telomerase activity. Telomerase is a ribonucleoprotein enzyme that synthesizes one strand of the telomeric DNA, using as a template an 11 nucleotide sequence contained within the RNA component of the enzyme. The invention relates to PNA molecules having a sequence of no more than 25 bases, which include the sequence GTTAGG. The uncharged nature of the PNA backbone increases the melting temperature of associating strands, increases the rate of association with targeted nucleic acids, and affords greater resistance of degradation by proteases or nucleases. The therapeutic PNAs may be used for treating disease conditions such as cancers, neoplasia, hyperplasia, neurodegenerative diseases, aging, human immunodeficiency virus (HIV) infection/AIDS (acquired immunodeficiency syndrome) and associated pathologies, fungal infections, and other diseases characterized by abnormal telomere metabolism or telomerase activity, in combination with antineoplastic and other cytotoxic or cytostatic agents, antifungal agents, and other nucleotides. PNAs may be used for molecular diagnostics, labelled PNAs are used as hybridization probes to detect or quantitate polynucleotides having a human telomerase RNA (hTR) sequence. PNA probes are also used for forensic identification of individuals, e.g. paternity testing, based on hTR gene restriction fragment length polymorphism (RFLP) pattern. PNAs are also useful as probes to detect the RNA component of a mammalian telomerase and as inhibitors of telomerase activity. The method of the present invention allows cancerous conditions to be detected with increased confidence and possibly at an earlier stage, before cells are detected as cancerous based on pathological characteristics. The diagnostic and prognostic methods of the present invention can be used to detect an immortal or neoplastic cell or tumour tissue or cancer of any origin, provided the cell expresses telomerase activity and its RNA component	
XX		
SQ	Sequence 13 BP; 3 A; 1 C; 5 G; 4 T; 0 U; 0 Other;	
	Query Match	2.9%; Score 13; DB 1; Length 13;
	Best Local Similarity	100.0%; pred.No.2.8e+02;
	Matches	13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy	44	GTCTTAACCCCTTAAAC 56
Dd	13	GTCTTAACCCCTTAAAC 1
RESULT 374		
AAA37547/c		
ID	AAA37547 standard; DNA; 13 BP.	
XX		
AC	AAA37547;	

Best Local Similarity 100.0%; Pred. No. 2.8e+02; Mismatches 0; Indels 0; Gaps 0;

CC diseases characterised by abnormal telomere metabolism or telomerase activity. The present sequence represents one of the PNA sequences of the CC invention

XX

SQ Sequence 13 BP; 2 A; 5 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 53 TAACTGAGAAGGG 65  
Db 13 TAACTGAGAAGGG 1

RESULT 376  
AAS15426/C  
ID AAS15426 standard; DNA; 13 BP.  
XX  
AC AAS15426;  
XX  
DT 14-FEB-2002 (first entry)  
XX  
DE PNA 5/XII inhibiting human and mammalian telomerase activity.  
XX  
KW Mammalian; peptide nucleic acid; probe; forensic; paternity testing;  
KW human telomerase RNA component; hTR gene RFLP pattern; cancer;  
KW inflammation; lymphoproliferative disease; autoimmune disease;  
KW neurodegenerative disease; neoplasia; hyperplasia; HIV; AIDS;  
KW human immunodeficiency virus; acquired immunodeficiency syndrome;  
KW telomere metabolism; mutant; cytostatic; anti-inflammatory;  
KW immunosuppressive; polyamide backbone; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..13  
FT /\*tag= a  
FT /note= "This sequence is a peptide nucleic acid, i.e. it  
FT contains a polyamide backbone instead of a deoxyribose  
FT backbone"  
XX  
PN US6294650-B1.  
XX  
XX 25-SEP-2001.  
XX  
XX 08-JUL-1999; 99US-00349532.  
XX  
XX 09-APR-1996; 96US-00630019.  
XX 09-APR-1997; 97US-00838545.  
XX (TEXA ) UNIV TEXAS SYSTEM.  
XX  
XX Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;  
XX WPI; 2001-638024/73.  
XX  
XX New peptide nucleic acids that hybridizes to the RNA component of mammalian telomerase, useful for treating or preventing cancer, or inflammation, lymphoproliferative diseases, autoimmune disease, or neurodegenerative diseases.  
XX  
XX Example 2: Col 37-38; 46pp; English.  
XX  
XX The present invention relates to peptide nucleic acids (PNAs), comprising a sequence of 6-25 nucleobases, that inhibit telomerase activity in mammalian cells by hybridising to the RNA component of mammalian telomerase. The PNAs are useful as probes to detect the RNA component of mammalian telomerase and as inhibitors of telomerase activity, or to detect and/or quantitate polynucleotide having the human telomerase RNA component (hTR) sequence, as well as in forensic identification of individuals, such as paternity testing or identification of criminal suspects or unknown descendants based on the hTR gene RFLP pattern. The PNA can be further used for treating or preventing cancer, inflammation, lymphoproliferative diseases, autoimmune disease, or neurodegenerative diseases. The PNAs in combination with other pharmaceuticals (such as anticneoplastic or cytostatic agents) can be used for treating neoplasia, hyperplasia, human immunodeficiency virus (HIV) infections, acquired immunodeficiency syndrome (AIDS) and associated pathologies, and other

CC

CC suspects or unknown descendants based on the hTR gene RFLP pattern. The  
 CC PNA can be further used for treating or preventing cancer, inflammation,  
 CC lymphoproliferative diseases, autoimmune disease, or neurodegenerative  
 CC diseases. The PNAs in combination with other pharmaceuticals (such as  
 CC antineoplastic or cytostatic agents) can be used for treating neoplasia,  
 CC hyperplasia, human immunodeficiency virus (HIV) infections, acquired  
 CC immunodeficiency syndrome (AIDS) and associated pathologies, and other  
 CC diseases characterised by abnormal telomere metabolism or telomerase  
 CC activity. The present sequence represents one of the PNA sequences of the  
 CC invention. Note: The present sequence represents SEQ ID No 4 in the SEQ  
 CC ID listing and column 4. However, table 1 in column 29 shows three  
 CC sequences with SEQ ID No 4. The first SEQ ID No 4 (PNA #6, AA515423)  
 CC appears to be identical to SEQ ID No 1 in the claims and the SEQ ID  
 CC listing. The second SEQ ID No 4 in table 1 appears to be identical to SEQ  
 CC ID No 41 (PNA #8, AA515454) in the SEQ ID listing. The third SEQ ID 4 is  
 CC the present sequence and appears to be identical to SEQ ID No 4 in the  
 CC SEQ ID listing and in column 4  
 XX  
 SQ Sequence 13 BP; 5 A; 1 C; 4 G; 3 T; 0 U; 0 Other;  
 Query Match 2.9%; Score 13; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 42 TTGTCTAACCCCTA 54  
 Db 13 TTGTCTAACCCCTA 1  
 RESULT 377  
 AA515433/c  
 ID AA515433 standard; DNA; 13 BP.  
 XX  
 AC AA515433;  
 XX  
 XX 14-FEB-2002 (first entry)  
 XX PNA 6/X inhibiting human and mammalian telomerase activity.  
 XX Mammalian; peptide nucleic acid; probe; forensic; paternity testing;  
 KW human telomerase RNA component; hTR gene RFLP pattern; cancer;  
 KW inflammation; lymphoproliferative disease; autoimmune disease;  
 KW neurodegenerative disease; neoplasia; hyperplasia; HIV; AIDS;  
 KW human immunodeficiency virus; acquired immunodeficiency syndrome;  
 KW telomere metabolism; mutant; cytostatic; anti-inflammatory;  
 KW immunosuppressive; polyamide backbone; ss.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 XX Key Location/Qualifiers  
 FT modified\_base 1..13  
 FT /\*tag= a  
 FT /note= "This sequence is a peptide nucleic acid, i.e. it  
 FT contains a polyamide backbone instead of a deoxyribose  
 FT backbone"  
 XX  
 XX US6294650-B1.  
 XX  
 XX 25-SEP-2001.  
 XX  
 XX 08-JUL-1999; 99US-00349532.  
 XX  
 XX 09-APR-1996; 96US-00630019.  
 XX 09-APR-1997; 97US-00838545.  
 XX  
 XX (TEXA ) UNIV TEXAS SYSTEM.  
 XX  
 XX Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;  
 XX WPI; 2001-638024/73.  
 XX  
 XX New peptide nucleic acids that hybridizes to the RNA component of

PT mammalian telomerase, useful for treating or preventing cancer, or  
 PT inflammation, lymphoproliferative diseases, autoimmune disease, or  
 PT neurodegenerative diseases.  
 XX Claim 7; Col 73; 46pp; English.  
 XX The present invention relates to peptide nucleic acids (PNAs), comprising  
 CC a sequence of 6-25 nucleobases, that inhibit telomerase activity in  
 CC mammalian cells by hybridising to the RNA component of mammalian  
 CC telomerase. The PNAs are useful as probes to detect the RNA component of  
 CC mammalian telomerase and as inhibitors of telomerase activity, or to  
 CC detect and/or quantitate polynucleotide having the human telomerase RNA  
 CC component (hTR) sequence, as well as in forensic identification of  
 CC individuals, such as paternity testing or identification of criminal  
 CC suspects or unknown descendants based on the hTR gene RFLP pattern. The  
 CC PNA can be further used for treating or preventing cancer, inflammation,  
 CC lymphoproliferative diseases, autoimmune disease, or neurodegenerative  
 CC diseases. The PNAs in combination with other pharmaceuticals (such as  
 CC antineoplastic or cytostatic agents) can be used for treating neoplasia,  
 CC hyperplasia, human immunodeficiency virus (HIV) infections, acquired  
 CC immunodeficiency syndrome (AIDS) and associated pathologies, and other  
 CC diseases characterised by abnormal telomere metabolism or telomerase  
 CC activity. The present sequence represents one of the PNA sequences of the  
 CC invention  
 XX  
 SQ Sequence 13 BP; 3 A; 1 C; 5 G; 4 T; 0 U; 0 Other;  
 Query Match 2.9%; Score 13; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 44 GTCTAACCCCTAAC 56  
 Db 13 GTCTAACCCCTAAC 1  
 RESULT 378  
 AA515469/c  
 ID AA515469 standard; DNA; 13 BP.  
 XX  
 AC AA515469;  
 XX  
 XX 14-FEB-2002 (first entry)  
 XX PNA 13 inhibiting human and mammalian telomerase activity.  
 XX Mammalian; peptide nucleic acid; probe; forensic; paternity testing;  
 KW human telomerase RNA component; hTR gene RFLP pattern; cancer;  
 KW inflammation; lymphoproliferative disease; autoimmune disease;  
 KW neurodegenerative disease; neoplasia; hyperplasia; HIV; AIDS;  
 KW human immunodeficiency virus; acquired immunodeficiency syndrome;  
 KW telomere metabolism; mutant; cytostatic; anti-inflammatory;  
 KW immunosuppressive; polyamide backbone; ss.  
 XX  
 OS Homo sapiens.  
 OS Synthetic.  
 XX  
 XX Key Location/Qualifiers  
 FT modified\_base 1..13  
 FT /\*tag= a  
 FT /note= "This sequence is a peptide nucleic acid, i.e. it  
 FT contains a polyamide backbone instead of a deoxyribose  
 FT backbone"  
 XX  
 XX US6294650-B1.  
 XX  
 XX 25-SEP-2001.  
 XX  
 XX 08-JUL-1999; 99US-00349532.  
 XX  
 XX 09-APR-1996; 96US-00630019.  
 XX 09-APR-1997; 97US-00838545.  
 XX



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PA (TEXA ) UNIV TEXAS SYSTEM.
XX Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;
XX WPI; 2001-638024/73.
XX
XX New peptide nucleic acids that hybridizes to the RNA component of
PT mammalian telomerase, useful for treating or preventing cancer,
PT inflammation, lymphoproliferative diseases, autoimmune disease, or
PT neurodegenerative diseases.
XX
XX Example 2; Col 37-38; 46pp; English.
XX
XX The present invention relates to peptide nucleic acids (PNAs), comprising
CC a sequence of 6-25 nucleobases, that inhibit telomerase activity in
CC mammalian cells by hybridising to the RNA component of mammalian
CC telomerase. The PNAs are useful as probes to detect the RNA component of
CC mammalian telomerase and as inhibitors of telomerase activity, or to
CC detect and/or quantitate polynucleotide having the human telomerase RNA
CC component (hTR) sequence, as well as in forensic identification of
CC individuals, such as paternity testing or identification of criminal
CC suspects or unknown descendants based on the hTR gene RFLP pattern. The
CC PNA can be further used for treating or preventing cancer, inflammation,
CC lymphoproliferative diseases, autoimmune disease, or neurodegenerative
CC diseases. The PNAs in combination with other pharmaceuticals (such as
CC antineoplastic or cytostatic agents) can be used for treating neoplasia,
CC hyperplasia, human immunodeficiency virus (HIV) infections, acquired
CC immunodeficiency syndrome (AIDS) and associated pathologies, and other
CC diseases characterised by abnormal telomere metabolism or telomerase
CC activity. The present sequence represents one of the PNA sequences of the
CC invention
XX
XX Sequence 13 BP; 1 A; 6 C; 2 G; 4 T; 0 U; 0 Other;
SQ
Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 55 ACTGAGAGGGCG 67
DB 13 ACTGAGAGGGCG 1
|||||
RESULT 379
AAS15465/c
ID AAS15465 standard; DNA; 13 BP.
XX
XX AAS15465;
AC
XX
XX 14-FEB-2002 (first entry)
DT
XX
XX PNA 3 inhibiting human and mammalian telomerase activity.
DE
XX
XX Mammalian; peptide nucleic acid; probe; forensic; paternity testing;
XX human telomerase RNA component; hTR gene RFLP pattern; cancer;
XX inflammation; lymphoproliferative disease; autoimmune disease;
XX neurodegenerative disease; neoplasia; hyperplasia; HIV; AIDS;
XX human immunodeficiency virus; acquired immunodeficiency syndrome;
XX telomere metabolism; mutant; cytostatic; anti-inflammatory;
XX immunosuppressive; polyamide backbone; ss.
XX
XX Homo sapiens.
OS Synthetic.
OS
XX
XX Key Location/Qualifiers
FH modified_base 1..13
FT /tag= a
FT /note= "This sequence is a peptide nucleic acid, i.e. it
FT contains a polyamide backbone instead of a deoxyribose
FT backbone"
XX
XX US6294650-B1.
PN
XX

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PD 25-SEP-2001.
XX
XX 08-JUL-1999; 99US-00349532.
XX
XX 09-APR-1996; 96US-00630019.
XX 03-APR-1997; 97US-00838545.
XX
XX (TEXA ) UNIV TEXAS SYSTEM.
XX
XX Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;
XX WPI; 2001-638024/73.
XX
XX New peptide nucleic acids that hybridizes to the RNA component of
PT mammalian telomerase, useful for treating or preventing cancer,
PT inflammation, lymphoproliferative diseases, autoimmune disease, or
PT neurodegenerative diseases.
XX
XX Example 2; Col 37-38; 46pp; English.
XX
XX The present invention relates to peptide nucleic acids (PNAs), comprising
CC a sequence of 6-25 nucleobases, that inhibit telomerase activity in
CC mammalian cells by hybridising to the RNA component of mammalian
CC telomerase. The PNAs are useful as probes to detect the RNA component of
CC mammalian telomerase and as inhibitors of telomerase activity, or to
CC detect and/or quantitate polynucleotide having the human telomerase RNA
CC component (hTR) sequence, as well as in forensic identification of
CC individuals, such as paternity testing or identification of criminal
CC suspects or unknown descendants based on the hTR gene RFLP pattern. The
CC PNA can be further used for treating or preventing cancer, inflammation,
CC lymphoproliferative diseases, autoimmune disease, or neurodegenerative
CC diseases. The PNAs in combination with other pharmaceuticals (such as
CC antineoplastic or cytostatic agents) can be used for treating neoplasia,
CC hyperplasia, human immunodeficiency virus (HIV) infections, acquired
CC immunodeficiency syndrome (AIDS) and associated pathologies, and other
CC diseases characterised by abnormal telomere metabolism or telomerase
CC activity. The present sequence represents one of the PNA sequences of the
CC invention
XX
XX Sequence 13 BP; 7 A; 1 C; 3 G; 2 T; 0 U; 0 Other;
SQ
Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 39 TTTTGTCTAACC 51
DB 13 TTTTGTCTAACC 1
|||||
RESULT 380
AAS15423/c
ID AAS15423 standard; DNA; 13 BP.
XX
XX AAS15423;
AC
XX
XX 14-FEB-2002 (first entry)
DT
XX
XX PNA 8/VI inhibiting human and mammalian telomerase activity.
DE
XX
XX Mammalian; peptide nucleic acid; probe; forensic; paternity testing;
XX human telomerase RNA component; hTR gene RFLP pattern; cancer;
XX inflammation; lymphoproliferative disease; autoimmune disease;
XX neurodegenerative disease; neoplasia; hyperplasia; HIV; AIDS;
XX human immunodeficiency virus; acquired immunodeficiency syndrome;
XX telomere metabolism; mutant; cytostatic; anti-inflammatory;
XX immunosuppressive; polyamide backbone; ss.
XX
XX Homo sapiens.
OS Synthetic.
OS
XX
XX Key Location/Qualifiers
FH modified_base 1..13
FT /tag= a
FT /note= "This sequence is a peptide nucleic acid, i.e. it
FT contains a polyamide backbone instead of a deoxyribose
FT backbone"
XX
XX US6294650-B1.
PN
XX

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FT FT /*tag= a
FT FT /note= "this sequence is a peptide nucleic acid, i.e. it
FT FT contains a polyamide backbone instead of a deoxyribose
FT FT backbone"
PN XX US6294650-B1.
XX XX 25-SEP-2001.
XX XX 08-JUL-1999; 99US-00349532.
XX XX 09-APR-1996; 96US-00630019.
XX XX 09-APR-1997; 97US-00838545.
XX XX (TEXA ) UNIV TEXAS SYSTEM.
XX XX Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;
XX XX WPI; 2001-638024/73.
XX XX New peptide nucleic acids that hybridizes to the RNA component of
XX XX mammalian telomerase, useful for treating or preventing cancer, or
XX XX inflammation, lymphoproliferative diseases, autoimmune disease, or
XX XX neurodegenerative diseases.
XX XX Claim 7; Col 73; 46pp; English.
XX XX The present invention relates to peptide nucleic acids (PNAs), comprising
XX XX a sequence of 6-25 nucleobases, that inhibit telomerase activity in
XX XX mammalian cells by hybridising to the RNA component of mammalian
XX XX telomerase. The PNAs are useful as probes to detect the RNA component of
XX XX mammalian telomerase and as inhibitors of telomerase activity, or to
XX XX detect and/or quantitate polynucleotide having the human telomerase RNA
XX XX component (hTR) sequence, as well as in forensic identification of
XX XX individuals, such as paternity testing or identification of criminal
XX XX suspects or unknown descendants based on the hTR gene RFLP pattern. The
XX XX PNA can be further used for treating or preventing cancer, inflammation,
XX XX lymphoproliferative diseases, autoimmune disease, or neurodegenerative
XX XX diseases. The PNAs in combination with other pharmaceuticals (such as
XX XX antineoplastic or cytostatic agents) can be used for treating neoplasia,
XX XX hyperplasia, human immunodeficiency virus (HIV) infections, acquired
XX XX immunodeficiency syndrome (AIDS) and associated pathologies, and other
XX XX diseases characterised by abnormal telomere metabolism or telomerase
XX XX activity. The present sequence represents one of the PNA sequences of the
XX XX invention. Note: The present sequence represents SED ID No 1 but is shown
XX XX as the first SEQ ID No 4 in table 1 (column 29)
XX XX Sequence 13 BP; 3 A; 1 C; 5 G; 4 T; 0 U; 0 Other;
XX XX Query Match 2.9%; Score 13; DB 1; Length 13;
XX XX Best Local Similarity 100.0%; Pred. No. 2.8e+02;
XX XX Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX XX 46 CTAACCCCTAACTG 58
XX XX |||||
XX XX 13 CTAACCCCTAACTG 1
XX XX
XX XX RESULT 381
XX XX AAS15459/c
XX XX ID AAS15459 standard; DNA; 13 BP.
XX XX AAS15459;
XX XX AAS15459;
XX XX 14-FEB-2002 (first entry)
XX XX Phosphorothioate (PS) oligomer III used to inhibit telomerase activity.
XX XX Mammalian; forensic; paternity testing; human telomerase RNA component;
XX XX hTR gene RFLP pattern; cancer; inflammation; lymphoproliferative disease;
XX XX autoimmune disease; neurodegenerative disease; neoplasia; hyperplasia;
XX XX HIV; AIDS; human immunodeficiency virus; telomere metabolism; mutant;
XX XX acquired immunodeficiency syndrome; cytostatic; anti-inflammatory;
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KW immunosuppressive; phosphorothioate; ss.
XX Homo sapiens.
OS Synthetic.
XX
XX FH Key Location/Qualifiers
XX FT modified_base 1..13
XX FT /*tag= a
XX FT /label= OTHER
XX FT /note= "Phosphorothioate internucleotide linkages"
XX
XX PN US6294650-B1.
XX XX 25-SEP-2001.
XX XX 08-JUL-1999; 99US-00349532.
XX XX 09-APR-1996; 96US-00630019.
XX XX 09-APR-1997; 97US-00838545.
XX XX (TEXA ) UNIV TEXAS SYSTEM.
XX XX Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;
XX XX WPI; 2001-638024/73.
XX XX New peptide nucleic acids that hybridizes to the RNA component of
XX XX mammalian telomerase, useful for treating or preventing cancer, or
XX XX inflammation, lymphoproliferative diseases, autoimmune disease, or
XX XX neurodegenerative diseases.
XX XX Example 1; Col 29; 46pp; English.
XX XX The present invention relates to peptide nucleic acids (PNAs), comprising
XX XX a sequence of 6-25 nucleobases, that inhibit telomerase activity in
XX XX mammalian cells by hybridising to the RNA component of mammalian
XX XX telomerase. The PNAs are useful as probes to detect the RNA component of
XX XX mammalian telomerase and as inhibitors of telomerase activity, or to
XX XX detect and/or quantitate polynucleotide having the human telomerase RNA
XX XX component (hTR) sequence, as well as in forensic identification of
XX XX individuals, such as paternity testing or identification of criminal
XX XX suspects or unknown descendants based on the hTR gene RFLP pattern. The
XX XX PNA can be further used for treating or preventing cancer, inflammation,
XX XX lymphoproliferative diseases, autoimmune disease, or neurodegenerative
XX XX diseases. The PNAs in combination with other pharmaceuticals (such as
XX XX antineoplastic or cytostatic agents) can be used for treating neoplasia,
XX XX hyperplasia, human immunodeficiency virus (HIV) infections, acquired
XX XX immunodeficiency syndrome (AIDS) and associated pathologies, and other
XX XX diseases characterised by abnormal telomere metabolism or telomerase
XX XX activity. The present sequence represents a phosphorothioate (PS)
XX XX oligomer used to inhibit telomerase activity in the methods of the
XX XX present invention
XX XX Sequence 13 BP; 5 A; 1 C; 4 G; 3 T; 0 U; 0 Other;
XX XX Query Match 2.9%; Score 13; DB 1; Length 13;
XX XX Best Local Similarity 100.0%; Pred. No. 2.8e+02;
XX XX Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX XX 42 TTGCTCTAACCCCTA 54
XX XX |||||
XX XX 13 TTGCTCTAACCCCTA 1
XX XX
XX XX RESULT 382
XX XX AAS15464/c
XX XX ID AAS15464 standard; DNA; 13 BP.
XX XX AAS15464;
XX XX AAS15464;
XX XX 14-FEB-2002 (first entry)
XX XX PNA 2 inhibiting human and mammalian telomerase activity.
XX XX
```

XX Mammalian; peptide nucleic acid; probe; forensic; paternity testing;  
 KW human telomerase RNA component; hTR gene RFLP pattern; cancer;  
 KW inflammation; lymphoproliferative disease; autoimmune disease;  
 KW neurodegenerative disease; neoplasia; hyperplasia; HIV; AIDS;  
 KW human immunodeficiency virus; acquired immunodeficiency syndrome;  
 KW telomere metabolism; mutant; cytostatic; anti-inflammatory;  
 KW immunosuppressive; polyamide backbone; ss.

XX Homo sapiens.  
 OS Synthetic.

XX Key Location/Qualifiers  
 FH modified\_base 1..13  
 FT /\*tag= a  
 FT /note= "This sequence is a peptide nucleic acid, i.e. it  
 FT contains a polyamide backbone instead of a deoxyribose  
 FT backbone"

XX US6294650-B1.  
 XX 25-SEP-2001.  
 XX 08-JUL-1999; 99US-00349532.  
 XX 09-APR-1996; 96US-00630019.  
 PR 09-APR-1997; 97US-00838545.  
 XX (TEXA ) UNIV TEXAS SYSTEM.  
 XX Shay JW, Wright WE, Piatyszek MA, Corey DR, Norton JC;  
 XX WPI; 2001-638024/73.  
 XX New peptide nucleic acids that hybridizes to the RNA component of  
 PT mammalian telomerase, useful for treating or preventing cancer, or  
 PT inflammation, lymphoproliferative diseases, autoimmune disease, or  
 PT neurodegenerative diseases.

XX Example 2; Col 37-38; 46pp; English.

XX The present invention relates to peptide nucleic acids (PNAs), comprising  
 CC a sequence of 6-25 nucleobases, that inhibit telomerase activity in  
 CC mammalian cells by hybridising to the RNA component of mammalian  
 CC telomerase. The PNAs are useful as probes to detect the RNA component of  
 CC mammalian telomerase and as inhibitors of telomerase activity, or to  
 CC detect and/or quantitate polynucleotide having the human telomerase RNA  
 CC component (hTR) sequence, as well as in forensic identification of  
 CC individuals, such as paternity testing or identification of criminal  
 CC suspects or unknown descendants based on the hTR gene RFLP pattern. The  
 CC PNA can be further used for treating or preventing cancer, inflammation,  
 CC lymphoproliferative diseases, autoimmune disease, or neurodegenerative  
 CC diseases. The PNAs in combination with other pharmaceuticals (such as  
 CC antineoplastic or cytostatic agents) can be used for treating neoplasia,  
 CC hyperplasia, human immunodeficiency virus (HIV) infections, acquired  
 CC immunodeficiency syndrome (AIDS) and associated pathologies, and other  
 CC diseases characterised by abnormal telomere metabolism or telomerase  
 CC activity. The present sequence represents one of the PNA sequences of the  
 CC invention

XX Sequence 13 BP; 8 A; 1 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 2.9%; Score 13; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 38 TTTTGTGCTAAC 50  
 |||||  
 Db 13 TTTTGTGCTAAC 1

RESULT 383  
 AAH26730/c

AAH26730 standard; DNA; 13 BP.  
 AAH26730;  
 26-NOV-2001 (first entry)  
 Phosphoramidate-linked 2'-arabino-fluorooligonucleotide.  
 2'-arabino-fluorooligonucleotide; phosphoramidate; telomerase; inhibitor;  
 infection; cancer; diagnosis; therapy; cytostatic; virucide; antisense;  
 antigen; ss.  
 Synthetic.  
 Key Location/Qualifiers  
 FH modified\_base 2..13  
 FT /\*tag= a  
 FT /mod\_base= OTHER  
 FT /note= "2'-arabino-fluoronucleosides"  
 FT modified\_base 2..13  
 FT /\*tag= b  
 FT /mod\_base= OTHER  
 FT /note= "phosphoramidate linkage"  
 XX WO200153307-A1.  
 XX 26-JUL-2001.  
 XX 19-JAN-2001; 2001WO-US001918.  
 XX 21-JAN-2000; 2000US-0178248P.  
 XX (GERO-) GERON CORP.  
 XX Gryaznov S, Schultz RG;  
 WPI; 2001-589652/66.  
 Polynucleotides, used to detect and isolate nucleic acids, inhibit  
 function of RNA and telomerase enzymes and to treat e.g. viral  
 infections, contain 2'-arabino-fluoronucleoside(s) linked to  
 nucleoside(s).

XX Example 6; Page 46; 61pp; English.

XX The present sequence is that of a N3'-P5' 2'-arabino-fluoro  
 phosphoramidate oligonucleotide that is complementary to telomerase RNA.  
 CC The oligonucleotide was used to assess the relative efficacy of novel 2'-  
 CC arabino-fluoro phosphoramidate oligonucleotides and their 2'-ribo-  
 CC fluorooligonucleotide counterparts (see AAH26728-35) for the inhibition  
 CC of telomerase activity. Novel phosphoramidate 2'-arabino-  
 CC fluorooligonucleotides are generally more acid stable, more resistant to  
 CC cellular proteases, and also show greater telomerase inhibition activity  
 CC than 2'-ribose-fluoro phosphoramidates. They are therefore useful for  
 CC treating cancer (claimed) and other diseases in which telomerase activity  
 CC is present at abnormal levels, such as hyperproliferative or autoimmune  
 CC diseases e.g. psoriasis, rheumatoid arthritis, immune system disorders  
 CC requiring immunosuppression, and in the treatment of viral infection  
 CC (claimed)

XX Sequence 13 BP; 5 A; 1 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 13; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGTCTAACCTA 54  
 |||||  
 Db 13 TTGTCTAACCTA 1

RESULT 384  
 AAH26734/c

AAH26734	standard; DNA; 13 BP.	AAH26734	standard; DNA; 13 BP.
AAH26734		AAH26734	
26-NOV-2001	(first entry)	26-NOV-2001	(first entry)
Phosphoramidate-linked 2'-ribose-fluorooligonucleotide.		Phosphoramidate-linked 2'-ribose-fluorooligonucleotide.	
2'-ribose-fluorooligonucleotide; phosphoramidate; telomerase; inhibitor; infection; cancer; diagnosis; therapy; cytostatic; virucide; antisense; antigen; ss.		2'-ribose-fluorooligonucleotide; phosphoramidate; telomerase; inhibitor; infection; cancer; diagnosis; therapy; cytostatic; virucide; antisense; antigen; ss.	
Synthetic.		Synthetic.	
Key	Location/Qualifiers	Key	Location/Qualifiers
modified_base	2..13	modified_base	2..13
modified_base	/mod_base= OTHER	modified_base	/mod_base= OTHER
modified_base	/note= "2'-ribose-fluoronucleosides"	modified_base	/note= "2'-ribose-fluoronucleosides"
modified_base	/tag= a	modified_base	/tag= a
modified_base	/tag= b	modified_base	/tag= b
modified_base	/mod_base= OTHER	modified_base	/mod_base= OTHER
modified_base	/note= "phosphoramidate linkage"	modified_base	/note= "phosphoramidate linkage"
WO200153307-A1.		WO200153307-A1.	
26-JUL-2001.		26-JUL-2001.	
19-JAN-2001; 2001WO-US001918.		19-JAN-2001; 2001WO-US001918.	
21-JAN-2000; 2000US-0178248P.		21-JAN-2000; 2000US-0178248P.	
(GERO-) GERON CORP.		(GERO-) GERON CORP.	
Gryaznov S, Schultz RG;		Gryaznov S, Schultz RG;	
WPI; 2001-589652/66.		WPI; 2001-589652/66.	
Polynucleotides, used to detect and isolate nucleic acids, inhibit function of RNA and telomerase enzymes and to treat e.g. viral infections, contain 2'-arabino-fluoronucleoside(s) linked to nucleoside(s).		Polynucleotides, used to detect and isolate nucleic acids, inhibit function of RNA and telomerase enzymes and to treat e.g. viral infections, contain 2'-arabino-fluoronucleoside(s) linked to nucleoside(s).	
Example 6; Page 46; 61pp; English.		Example 6; Page 46; 61pp; English.	
The present sequence is that of a 2'-ribose-fluoro phosphoramidate oligonucleotide that is complementary to telomerase RNA. The oligonucleotide was used to assess the relative efficacy of novel 2'-arabino-fluoro phosphoramidate oligonucleotides and their 2'-ribose fluorooligonucleotide counterparts (see AAH26728-35) for the inhibition of telomerase activity. Novel phosphoramidate 2'-arabino-fluorooligonucleotides are generally more acid stable, more resistant to cellular proteases, and also show greater telomerase inhibition activity than 2'-ribose-fluoro phosphoramidates. They are therefore useful for treating cancer (claimed) and other diseases in which telomerase activity is present at abnormal levels, such as hyperproliferative or autoimmune diseases e.g. psoriasis, rheumatoid arthritis, immune system disorders requiring immunosuppression, and in the treatment of viral infection (claimed)		The present sequence is that of a 2'-ribose-fluoro phosphoramidate oligonucleotide that is complementary to telomerase RNA. The oligonucleotide was used to assess the relative efficacy of novel 2'-arabino-fluoro phosphoramidate oligonucleotides and their 2'-ribose fluorooligonucleotide counterparts (see AAH26728-35) for the inhibition of telomerase activity. Novel phosphoramidate 2'-arabino-fluorooligonucleotides are generally more acid stable, more resistant to cellular proteases, and also show greater telomerase inhibition activity than 2'-ribose-fluoro phosphoramidates. They are therefore useful for treating cancer (claimed) and other diseases in which telomerase activity is present at abnormal levels, such as hyperproliferative or autoimmune diseases e.g. psoriasis, rheumatoid arthritis, immune system disorders requiring immunosuppression, and in the treatment of viral infection (claimed)	
Sequence 13 BP; 5 A; 1 C; 4 G; 3 T; 0 U; 0 Other;		Sequence 13 BP; 5 A; 1 C; 4 G; 3 T; 0 U; 0 Other;	
Query Match	2.9%; Score 13; DB 1; Length 13;	Query Match	2.9%; Score 13; DB 1; Length 13;
Best Local Similarity	100.0%; Pred. No. 2.8e+02;	Best Local Similarity	100.0%; Pred. No. 2.8e+02;
Matches	13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	Matches	13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
42 TTGTCTAACCCCTA 54		42 TTGTCTAACCCCTA 54	
13 TTGTCTAACCCCTA 1		13 TTGTCTAACCCCTA 1	
RESULT 385		RESULT 385	
AAH26734		AAH26734	

RESULT 385  
AAS15937/C

AA15921/C  
ID AA15921 standard; DNA; 13 BP.  
XX  
AC AA15921;  
XX  
DT 27-FEB-2002 (first entry)  
XX  
DE Human telomerase polynucleotide inhibitor #2.  
XX  
KW Human; telomerase; hTR; cytostatic; anti-inflammatory; adenocarcinoma;  
KW breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease;  
KW fertility; inflammatory condition; tumour; cancer; veterinary;  
KW immunosuppression; telomerase inhibitor; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..13  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "N3'-PS' phosphoramidate linkages"  
XX  
PN WO200174136-A2.  
XX  
PD 11-OCT-2001.  
XX  
PF 30-MAR-2001; 2001WO-US010476.  
XX  
PR 31-MAR-2000; 2000US-00540119.  
XX  
PA (GERO-) GERON CORP.  
XX  
PI Gryaznov SM, Pruzan R, Weinrich SL;  
XX  
DR WPI; 2001-656955/75.  
XX  
PT New polynucleotide useful for inhibiting telomerase activity in cells, or  
PT for treating telomerase-mediated condition or disease, such as cancers,  
PT tumors, Hodgkin's disease, or inflammatory conditions.  
XX  
PS Claim 8; Page 36; 48pp; English.  
XX  
CC The invention relates to polynucleotide inhibitors (I) and methods for  
CC inhibiting telomerase activity. (I) are useful in inhibiting telomerase  
CC activity and proliferation of a telomerase positive cell, and in  
CC manufacturing a medicament for inhibiting telomerase activity in a cell  
CC and in treating telomerase-mediated condition or disease, such as  
CC adenocarcinoma of breast, prostate or colon, mixed cell leukaemia,  
CC Hodgkin's disease, fertility and inflammatory conditions. (I) are also  
CC useful in treating a tumour or in manufacturing a medicament for the  
CC treatment of tumour. The polynucleotide inhibitors may also be used in  
CC diagnostic assays for detecting RNA or DNA. Inhibition of telomerase  
CC activity in cells in vivo is useful in prophylactic and therapeutic  
CC methods of treating cancer and other disorders involving inappropriate  
CC expression of telomerase, and in treating veterinary proliferative  
CC diseases. Inhibition of telomerase in haematopoietic stem cells is useful  
CC for immunosuppression and for selectively down-regulating specific  
CC branches of the immune system. The present sequence represents human  
CC telomerase polynucleotide inhibitor #2, as described in the method of the  
XX invention  
SQ Sequence 13 BP; 4 A; 2 C; 6 G; 1 T; 0 U; 0 Other;  
  
Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 143 GCCTTCCACCGTT 155  
DB 13 GCCTTCCACCGTT 1

RESULT 387  
AA15926/C  
ID AA15926 standard; DNA; 13 BP.  
XX  
AC AA15926;  
XX  
DT 27-FEB-2002 (first entry)  
XX  
DE Human telomerase polynucleotide inhibitor #7.  
XX  
KW Human; telomerase; hTR; cytostatic; anti-inflammatory; adenocarcinoma;  
KW breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease;  
KW fertility; inflammatory condition; tumour; cancer; veterinary;  
KW immunosuppression; telomerase inhibitor; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
FH Key Location/Qualifiers  
FT modified\_base 1..13  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "N3'-PS' phosphoramidate linkages"  
XX  
PN WO200174136-A2.  
XX  
PD 11-OCT-2001.  
XX  
PF 30-MAR-2001; 2001WO-US010476.  
XX  
PR 31-MAR-2000; 2000US-00540119.  
XX  
PA (GERO-) GERON CORP.  
XX  
PI Gryaznov SM, Pruzan R, Weinrich SL;  
XX  
DR WPI; 2001-656955/75.  
XX  
PT New polynucleotide useful for inhibiting telomerase activity in cells, or  
PT for treating telomerase-mediated condition or disease, such as cancers,  
PT tumors, Hodgkin's disease, or inflammatory conditions.  
XX  
PS Claim 8; Page 36; 48pp; English.  
XX  
CC The invention relates to polynucleotide inhibitors (I) and methods for  
CC inhibiting telomerase activity. (I) are useful in inhibiting telomerase  
CC activity and proliferation of a telomerase positive cell, and in  
CC manufacturing a medicament for inhibiting telomerase activity in a cell  
CC and in treating telomerase-mediated condition or disease, such as  
CC adenocarcinoma of breast, prostate or colon, mixed cell leukaemia,  
CC Hodgkin's disease, fertility and inflammatory conditions. (I) are also  
CC useful in treating a tumour or in manufacturing a medicament for the  
CC treatment of tumour. The polynucleotide inhibitors may also be used in  
CC diagnostic assays for detecting RNA or DNA. Inhibition of telomerase  
CC activity in cells in vivo is useful in prophylactic and therapeutic  
CC methods of treating cancer and other disorders involving inappropriate  
CC expression of telomerase, and in treating veterinary proliferative  
CC diseases. Inhibition of telomerase in haematopoietic stem cells is useful  
CC for immunosuppression and for selectively down-regulating specific  
CC branches of the immune system. The present sequence represents human  
CC telomerase polynucleotide inhibitor #7, as described in the method of the  
XX invention  
SQ Sequence 13 BP; 3 A; 2 C; 8 G; 0 T; 0 U; 0 Other;  
  
Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 137 CCTGCCGCGCTTC 149  
DB 13 CCTGCCGCGCTTC 1

RESULT 388	RESULT 389
AAS15930/c	AAS15935/c
ID AAS15930 standard; DNA; 13 BP.	ID AAS15935 standard; DNA; 13 BP.
AC AAS15930;	AC AAS15935;
XX	XX
DT 27-FEB-2002 (first entry)	DT 27-FEB-2002 (first entry)
XX	XX
DE Human telomerase polynucleotide inhibitor #11.	DE Human telomerase polynucleotide inhibitor #16.
XX	XX
KW Human; telomerase; hTR; cytostatic; anti-inflammatory; adenocarcinoma;	KW Human; telomerase; hTR; cytostatic; anti-inflammatory; adenocarcinoma;
KW breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease;	KW breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease;
KW fertility; inflammatory condition; tumour; cancer; veterinary;	KW fertility; inflammatory condition; tumour; cancer; veterinary;
KW immunosuppression; telomerase inhibitor; ss.	KW immunosuppression; telomerase inhibitor; ss.
XX	XX
OS Homo sapiens.	OS Homo sapiens.
OS Synthetic.	OS Synthetic.
XX	XX
FH Key Location/Qualifiers	FH Key Location/Qualifiers
FT modified_base 1..13	FT modified_base 1..13
FT /*tag= a	FT /*tag= a
FT /mod_base= OTHER	FT /mod_base= OTHER
FT /note= "N3'-P5' phosphoramidate linkages"	FT /note= "N3'-P5' phosphoramidate linkages"
XX	XX
PN WO200174136-A2.	PN WO200174136-A2.
XX	XX
PD 11-OCT-2001.	PD 11-OCT-2001.
XX	XX
PF 30-MAR-2001; 2001WO-US010476.	PF 30-MAR-2001; 2001WO-US010476.
XX	XX
PR 31-MAR-2000; 2000US-00540119.	PR 31-MAR-2000; 2000US-00540119.
XX	XX
PA (GERO-) GERON CORP.	PA (GERO-) GERON CORP.
XX	XX
PI Gryaznov SM, Pruzan R, Weinrich SL;	PI Gryaznov SM, Pruzan R, Weinrich SL;
XX	XX
DR WPI; 2001-656955/75.	DR WPI; 2001-656955/75.
XX	XX
PT New polynucleotide useful for inhibiting telomerase activity in cells, or	PT New polynucleotide useful for inhibiting telomerase activity in cells, or
PT for treating telomerase-mediated condition or disease, such as cancers,	PT for treating telomerase-mediated condition or disease, such as cancers,
PT tumors, Hodgkin's disease, or inflammatory conditions.	PT tumors, Hodgkin's disease, or inflammatory conditions.
XX	XX
PS Example 3; Page 32; 48pp; English.	PS Claim 8; Page 36; 48pp; English.
XX	XX
CC The invention relates to polynucleotide inhibitors (I) and methods for	CC The invention relates to polynucleotide inhibitors (I) and methods for
CC inhibiting telomerase activity. (I) are useful in inhibiting telomerase	CC inhibiting telomerase activity. (I) are useful in inhibiting telomerase
CC activity and proliferation of a telomerase positive cell, and in	CC activity and proliferation of a telomerase positive cell, and in
CC manufacturing a medicament for inhibiting telomerase activity in a cell	CC manufacturing a medicament for inhibiting telomerase activity in a cell
CC and in treating telomerase-mediated condition or disease, such as	CC and in treating telomerase-mediated condition or disease, such as
CC adenocarcinoma of breast, prostate or colon, mixed cell leukaemia,	CC adenocarcinoma of breast, prostate or colon, mixed cell leukaemia,
CC Hodgkin's disease, fertility and inflammatory conditions. (I) are also	CC Hodgkin's disease, fertility and inflammatory conditions. (I) are also
CC useful in treating a tumour or in manufacturing a medicament for the	CC useful in treating a tumour or in manufacturing a medicament for the
CC treatment of tumour. The polynucleotide inhibitors may also be used in	CC treatment of tumour. The polynucleotide inhibitors may also be used in
CC diagnostic assays for detecting RNA or DNA. Inhibition of telomerase	CC diagnostic assays for detecting RNA or DNA. Inhibition of telomerase
CC activity in cells in vivo is useful in prophylactic and therapeutic	CC activity in cells in vivo is useful in prophylactic and therapeutic
CC methods of treating cancer and other disorders involving inappropriate	CC methods of treating cancer and other disorders involving inappropriate
CC expression of telomerase, and in treating veterinary proliferative	CC expression of telomerase, and in treating veterinary proliferative
CC diseases. Inhibition of telomerase in haematopoietic stem cells is useful	CC expression of telomerase, and in treating veterinary proliferative
CC for immunosuppression and for selectively down-regulating specific	CC diseases. Inhibition of telomerase in haematopoietic stem cells is useful
CC branches of the immune system. The present sequence represents human	CC for immunosuppression and for selectively down-regulating specific
CC telomerase polynucleotide inhibitor #11, as described in the method of	CC branches of the immune system. The present sequence represents human
CC the invention	CC telomerase polynucleotide inhibitor #16, as described in the method of
XX	XX
SQ Sequence 13 BP; 5 A; 2 C; 3 G; 3 T; 0 U; 0 Other;	SQ Sequence 13 BP; 2 A; 1 C; 1 G; 9 T; 0 U; 0 Other;
Query Match 2.9%; Score 13; DB 1; Length 13;	Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;	Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 154 TTCATTCAGGC 166	QY 167 AACACAAAATGT 179
DB 13 TTCATTCAGGC 1	

```
Db 13 AACACAAAATGT 1
RESULT 390
AAS15922/c
ID AAS15922 standard; DNA; 13 BP.
XX
AC AAS15922;
XX
DT 27-FEB-2002 (first entry)
XX
DE Human telomerase polynucleotide inhibitor #3.
XX
KW Human; telomerase; hTR; cytostatic; anti-inflammatory; adenocarcinoma;
KW breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease;
KW fertility; inflammatory condition; tumour; cancer; veterinary;
KW immunosuppression; telomerase inhibitor; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..13
FT /tag= a
FT /mod_base= OTHER
FT /note= "N3'-P5' phosphoramidate linkages"
XX
PN WO200174136-A2.
XX
PD 11-OCT-2001.
XX
PF 30-MAR-2001; 2001WO-US010476.
XX
PR 31-MAR-2000; 2000US-00540119.
XX
PA (GERO-) GERON CORP.
XX
PI Gryaznov SM, Pruzan R, Weinrich SL;
XX WPI; 2001-656955/75.
XX
PT New polynucleotide useful for inhibiting telomerase activity in cells, or
PT for treating telomerase-mediated condition or disease, such as cancers,
PT tumors, Hodgkin's disease, or inflammatory conditions.
XX
PS Claim 8; Page 36; 48pp; English.
XX
CC The invention relates to polynucleotide inhibitors (I) and methods for
CC inhibiting telomerase activity. (I) are useful in inhibiting telomerase
CC activity and proliferation of a telomerase positive cell, and in
CC manufacturing a medicament for inhibiting telomerase activity in a cell
CC and in treating telomerase-mediated condition or disease, such as
CC adenocarcinoma of breast, prostate or colon, mixed cell leukaemia,
CC Hodgkin's disease, fertility and inflammatory conditions. (I) are also
CC useful in treating a tumour or in manufacturing a medicament for the
CC treatment of tumour. The polynucleotide inhibitors may also be used in
CC diagnostic assays for detecting RNA or DNA. Inhibition of telomerase
CC activity in cells in vivo is useful in prophylactic and therapeutic
CC methods of treating cancer and other disorders involving inappropriate
CC expression of telomerase, and in treating veterinary proliferative
CC diseases. Inhibition of telomerase in haematopoietic stem cells is useful
CC for immunosuppression and for selectively down-regulating specific
CC branches of the immune system. The present sequence represents human
CC telomerase polynucleotide inhibitor #3, as described in the method of the
CC invention
XX
SQ Sequence 13 BP; 3 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 142 CGCCTTCACCGT 154
```

```
Db 13 CGCCTTCACCGT 1
RESULT 391
AAS15923/c
ID AAS15923 standard; DNA; 13 BP.
XX
AC AAS15923;
XX
DT 27-FEB-2002 (first entry)
XX
DE Human telomerase polynucleotide inhibitor #4.
XX
KW Human; telomerase; hTR; cytostatic; anti-inflammatory; adenocarcinoma;
KW breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease;
KW fertility; inflammatory condition; tumour; cancer; veterinary;
KW immunosuppression; telomerase inhibitor; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..13
FT /tag= a
FT /mod_base= OTHER
FT /note= "N3'-P5' phosphoramidate linkages"
XX
PN WO200174136-A2.
XX
PD 11-OCT-2001.
XX
PF 30-MAR-2001; 2001WO-US010476.
XX
PR 31-MAR-2000; 2000US-00540119.
XX
PA (GERO-) GERON CORP.
XX
PI Gryaznov SM, Pruzan R, Weinrich SL;
XX WPI; 2001-656955/75.
XX
PT New polynucleotide useful for inhibiting telomerase activity in cells, or
PT for treating telomerase-mediated condition or disease, such as cancers,
PT tumors, Hodgkin's disease, or inflammatory conditions.
XX
PS Claim 8; Page 36; 48pp; English.
XX
CC The invention relates to polynucleotide inhibitors (I) and methods for
CC inhibiting telomerase activity. (I) are useful in inhibiting telomerase
CC activity and proliferation of a telomerase positive cell, and in
CC manufacturing a medicament for inhibiting telomerase activity in a cell
CC and in treating telomerase-mediated condition or disease, such as
CC adenocarcinoma of breast, prostate or colon, mixed cell leukaemia,
CC Hodgkin's disease, fertility and inflammatory conditions. (I) are also
CC useful in treating a tumour or in manufacturing a medicament for the
CC treatment of tumour. The polynucleotide inhibitors may also be used in
CC diagnostic assays for detecting RNA or DNA. Inhibition of telomerase
CC activity in cells in vivo is useful in prophylactic and therapeutic
CC methods of treating cancer and other disorders involving inappropriate
CC expression of telomerase, and in treating veterinary proliferative
CC diseases. Inhibition of telomerase in haematopoietic stem cells is useful
CC for immunosuppression and for selectively down-regulating specific
CC branches of the immune system. The present sequence represents human
CC telomerase polynucleotide inhibitor #4, as described in the method of the
CC invention
XX
SQ Sequence 13 BP; 2 A; 2 C; 8 G; 1 T; 0 U; 0 Other;
Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

QY 141 CCGCCTTCCACCG 153  
| | | | | | | | | |  
Db 13 CCGCCTTCCACCG 1

RESULT 392  
AAS15925/C  
ID AAS15925 standard; DNA; 13 BP.  
XX  
AC AAS15925;  
XX

27-FEB-2002 (first entry)

Human telomerase polynucleotide inhibitor #6.

Human; telomerase; hTR; cytostatic; anti-inflammatory; adenocarcinoma;  
breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease;  
fertility; inflammatory condition; tumour; cancer; veterinary;  
immunosuppression; telomerase inhibitor; ss.

OS Homo sapiens.  
OS Synthetic.

Key Location/Qualifiers  
modified\_base 1..13  
/\*tag= a  
/mod\_base= OTHER  
/note= "N3'-P5' phosphoramidate linkages"

WO200174136-A2.

11-OCT-2001.

30-MAR-2001; 2001WO-US010476.

31-MAR-2000; 2000US-00540119.

(GERO-) GERON CORP.

Gryaznov SM, Pruzan R, Weinrich SL;

WPI; 2001-656955/75.

New polynucleotide useful for inhibiting telomerase activity in cells, or  
for treating telomerase-mediated condition or disease, such as cancers,  
tumors, Hodgkin's disease, or inflammatory conditions.

Claim 8; Page 36; 48pp; English.

The invention relates to polynucleotide inhibitors (I) and methods for  
inhibiting telomerase activity. (I) are useful in inhibiting telomerase  
activity and proliferation of a telomerase positive cell, and in  
manufacturing a medicament for inhibiting telomerase activity in a cell  
and in treating telomerase-mediated condition or disease, such as  
adenocarcinoma of breast, prostate or colon, mixed cell leukaemia,  
Hodgkin's disease, fertility and inflammatory conditions. (I) are also  
useful in treating a tumour or in manufacturing a medicament for the  
treatment of tumour. The polynucleotide inhibitors may also be used in  
diagnostic assays for detecting RNA or DNA. Inhibition of telomerase  
activity in cells in vivo is useful in prophylactic and therapeutic  
methods of treating cancer and other disorders involving inappropriate  
expression of telomerase, and in treating veterinary proliferative  
diseases. Inhibition of telomerase in haematopoietic stem cells is useful  
for immunosuppression and for selectively down-regulating specific  
branches of the immune system. The present sequence represents human  
telomerase polynucleotide inhibitor #6, as described in the method of the  
invention

Sequence 13 BP; 3 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 138 CTGCGCCTTCCA 150  
| | | | | | | | | |  
Db 13 CTGCGCCTTCCA 1

RESULT 393  
AAS15924/C  
ID AAS15924 standard; DNA; 13 BP.  
XX  
AC AAS15924;  
XX

27-FEB-2002 (first entry)

Human telomerase polynucleotide inhibitor #5.

Human; telomerase; hTR; cytostatic; anti-inflammatory; adenocarcinoma;  
breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease;  
fertility; inflammatory condition; tumour; cancer; veterinary;  
immunosuppression; telomerase inhibitor; ss.

OS Homo sapiens.  
OS Synthetic.

Key Location/Qualifiers  
modified\_base 1..13  
/\*tag= a  
/mod\_base= OTHER  
/note= "N3'-P5' phosphoramidate linkages"

WO200174136-A2.

11-OCT-2001.

30-MAR-2001; 2001WO-US010476.

31-MAR-2000; 2000US-00540119.

(GERO-) GERON CORP.

Gryaznov SM, Pruzan R, Weinrich SL;

WPI; 2001-656955/75.

New polynucleotide useful for inhibiting telomerase activity in cells, or  
for treating telomerase-mediated condition or disease, such as cancers,  
tumors, Hodgkin's disease, or inflammatory conditions.

Claim 8; Page 36; 48pp; English.

The invention relates to polynucleotide inhibitors (I) and methods for  
inhibiting telomerase activity. (I) are useful in inhibiting telomerase  
activity and proliferation of a telomerase positive cell, and in  
manufacturing a medicament for inhibiting telomerase activity in a cell  
and in treating telomerase-mediated condition or disease, such as  
adenocarcinoma of breast, prostate or colon, mixed cell leukaemia,  
Hodgkin's disease, fertility and inflammatory conditions. (I) are also  
useful in treating a tumour or in manufacturing a medicament for the  
treatment of tumour. The polynucleotide inhibitors may also be used in  
diagnostic assays for detecting RNA or DNA. Inhibition of telomerase  
activity in cells in vivo is useful in prophylactic and therapeutic  
methods of treating cancer and other disorders involving inappropriate  
expression of telomerase, and in treating veterinary proliferative  
diseases. Inhibition of telomerase in haematopoietic stem cells is useful  
for immunosuppression and for selectively down-regulating specific  
branches of the immune system. The present sequence represents human  
telomerase polynucleotide inhibitor #5, as described in the method of the  
invention

Sequence 13 BP; 3 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.8e+02;



Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 139 TGCCGCTTCCAC 151  
| | | | | | | | | |  
Db 13 TGCCGCTTCCAC 1

RESULT 394  
AAS15938/C  
ID AAS15938 standard; DNA; 13 BP.  
XX  
AC AAS15938;  
XX  
DT 27-FEB-2002 (first entry)  
XX  
DE Human telomerase polynucleotide inhibitor #19.  
XX  
KW Human; telomerase; hTR; cytostatic; anti-inflammatory; adenocarcinoma;  
KW breast; prostate; colon; mixed cell leukaemia; Hodgkin's disease;  
KW fertility; inflammatory condition; tumour; cancer; veterinary;  
KW immunosuppression; telomerase inhibitor; ss.  
XX  
OS Homo sapiens.  
OS Synthetic.  
XX  
Key Location/Qualifiers  
FH modified\_base 1..13  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "N3'-P5' phosphoramidate linkages"  
XX  
WO200174136-A2.  
FN  
XX  
PD 11-OCT-2001.  
XX  
XX  
PF 30-MAR-2001; 2001WO-US010476.  
XX  
XX  
PR 31-MAR-2000; 2000US-00540119.  
XX  
XX  
PA (GERO-) GERON CORP.  
XX  
PI Gryaznov SM, Pruzan R, Weinrich SL;  
XX  
XX WPI; 2001-656955/75.  
XX  
XX  
PT New polynucleotide useful for inhibiting telomerase activity in cells, or  
PT for treating telomerase-mediated condition or disease, such as cancers,  
PT tumors, Hodgkin's disease, or inflammatory conditions.  
XX  
PS Example 3; Page 32; 48pp; English.  
XX  
XX The invention relates to polynucleotide inhibitors (I) and methods for  
CC inhibiting telomerase activity. (I) are useful in inhibiting telomerase  
CC activity and proliferation of a telomerase positive cell, and in  
CC manufacturing a medicament for inhibiting telomerase activity in a cell  
CC and in treating telomerase-mediated condition or disease, such as  
CC adenocarcinoma of breast, prostate or colon, mixed cell leukaemia,  
CC Hodgkin's disease, fertility and inflammatory conditions. (I) are also  
CC useful in treating a tumour or in manufacturing a medicament for the  
CC treatment of tumour. The polynucleotide inhibitors may also be used in  
CC diagnostic assays for detecting RNA or DNA. Inhibition of telomerase  
CC activity in cells in vivo is useful in prophylactic and therapeutic  
CC methods of treating cancer and other disorders involving inappropriate  
CC expression of telomerase, and in treating veterinary proliferative  
CC diseases. Inhibition of telomerase in haematopoietic stem cells is useful  
CC for immunosuppression and for selectively down-regulating specific  
CC branches of the immune system. The present sequence represents human  
CC telomerase polynucleotide inhibitor #19, as described in the method of  
CC the invention  
XX  
SQ Sequence 13 BP; 1 A; 2 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 2.9%; Score 13; DB 1; Length 13;

Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 161 TAGAGCAACAAA 173  
| | | | | | | | | |  
Db 13 TAGAGCAACAAA 1

RESULT 395  
AAF81193/C  
ID AAF81193 standard; DNA; 13 BP.  
XX  
AC AAF81193;  
XX  
DT 30-MAY-2001 (first entry)  
XX  
DE Thiophosphoramidate oligonucleotide, SEQ ID NO: 2.  
XX  
KW Thiophosphoramidate oligonucleotide; virucide; cytostatic;  
KW immunosuppressive; contraceptive; RNA inhibitor; telomerase inhibitor;  
KW antisense therapy; viral infection; cancer; hyperproliferative disorder;  
KW autoimmune disorder; ss.  
XX  
OS Synthetic.  
XX  
PN WO200118015-A1.  
XX  
PD 15-MAR-2001.  
XX  
PF 08-SEP-2000; 2000WO-US024688.  
XX  
PR 10-SEP-1999; 99US-0153201P.  
PR 19-OCT-1999; 99US-0160444P.  
XX  
XX (GERO-) GERON CORP.  
XX  
PI Gryaznov S, Pongracz K, Matray T;  
XX  
XX WPI; 2001-265967/27.  
XX  
XX Novel thiophosphoramidate polynucleotide useful for detection of RNA or  
PT DNA having a given target sequence, for inhibiting RNA function in a  
PT cell, and for treating cancer and viral infection.  
XX  
PS Example 3; Page 46; 68pp; English.  
XX  
XX The present sequence was synthesised in an example illustrating an  
CC invention relating to polynucleotides comprising a non-homopolymERIC  
CC sequence of nucleoside subunits joined by at least one inter-subunit  
CC linkage that is a N3'-P5' thiophosphoramidate. The thiophosphoramidate  
CC oligonucleotides retain a high RNA binding affinity and exhibit a much  
CC higher acid stability. They are useful for detecting a specific sequence  
CC in a sample, by forming a hybridisation complex with the sequence. They  
CC are useful for inhibiting function of an RNA in a cell (for inhibiting  
CC translation of a mRNA or for inhibiting telomerase enzyme in a cell).  
CC They are also useful in the preparation of a medicament for treatment of  
CC viral infection or cancer. The oligonucleotides are useful for anti-sense  
CC and anti-gene diagnostic or therapeutic applications and may be used for  
CC treating telomerase-mediated conditions or diseases, such as  
CC hyperproliferative and autoimmune disorders, and for contraceptive  
CC purposes  
XX  
SQ Sequence 13 BP; 5 A; 1 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGTCTAACCCCTA 54  
| | | | | | | | | |  
Db 13 TTGTCTAACCCCTA 1

RESULT 396  
AAAF81195/c  
ID AAF81195 standard; DNA; 13 BP.  
XX  
XX  
AC AAF81195;  
XX  
XX 30-MAY-2001 (first entry)  
XX  
XX  
XX Thiophosphoramidate oligonucleotide, SEQ ID NO: 10.  
XX  
XX  
XX Thiophosphoramidate oligonucleotide; virucide; cytostatic;  
XX immunosuppressive; contraceptive; RNA inhibitor; telomerase inhibitor;  
XX antisense therapy; viral infection; cancer; hyperproliferative disorder;  
XX autoimmune disorder; ss.  
XX  
XX Synthetic.  
XX  
XX WO200118015-A1.  
XX  
XX 15-MAR-2001.  
XX  
XX 08-SEP-2000; 2000WO-US024688.  
XX  
XX 10-SEP-1999; 99US-0153201P.  
XX 19-OCT-1999; 99US-0160444P.  
XX  
XX (GERO-) GERON CORP.  
XX  
XX Gryaznov S, Pongracz K, Matray T;  
XX WPI; 2001-265967/27.  
XX  
XX Novel thiophosphoramidate polynucleotide useful for detection of RNA or  
XX DNA having a given target sequence, for inhibiting RNA function in a  
XX cell, and for treating cancer and viral infection.  
XX  
XX Example 7; Page 47; 68pp; English.  
XX  
XX The present sequence was synthesised in an example illustrating an  
XX invention relating to polynucleotides comprising a non-homopolymeric  
XX sequence of nucleoside subunits joined by at least one inter-subunit  
XX linkage that is a 3'-ps' thiophosphoramidate. The thiophosphoramidate  
XX oligonucleotides retain a high RNA binding affinity and exhibit a much  
XX higher acid stability. They are useful for detecting a specific sequence  
XX in a sample, by forming a hybridisation complex with the sequence. They  
XX are useful for inhibiting function of an RNA in a cell (for inhibiting  
XX translation of a mRNA or for inhibiting telomerase enzyme in a cell).  
XX They are also useful in the preparation of a medicament for treatment of  
XX viral infection or cancer. The oligonucleotides are useful for anti-sense  
XX and anti-gene diagnostic or therapeutic applications and may be used for  
XX treating telomerase-mediated conditions or diseases, such as  
XX hyperproliferative and autoimmune disorders, and for contraceptive  
XX purposes  
XX  
XX Sequence 13 BP; 3 A; 1 C; 5 G; 4 T; 0 U; 0 Other;  
Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
OY 46 CTAACCCCTAACTG 58  
Db 13 CTAACCCCTAACTG 1  
RESULT 397  
AAD50105/c  
ID AAD50105 standard; DNA; 13 BP.  
XX  
XX  
AC AAD50105;  
XX  
XX 24-MAR-2003 (first entry)  
XX  
XX

DE Oligonucleotide #1 used in conjugates of the invention.  
XX  
XX Medicine; telomerase; tumour; cancer; leukaemia; lymphoma; ss.  
XX  
XX Unidentified.  
XX  
XX WO200277184-A2.  
XX  
XX 03-OCT-2002.  
XX  
XX 21-MAR-2002; 2002WO-US009138.  
XX  
XX 23-MAR-2001; 2001US-0278322P.  
XX  
XX (GERO-) GERON CORP.  
XX  
XX Gryaznov S, Pongracz K, Tolman RL, Morin GB;  
XX WPI; 2003-092850/08.  
XX  
XX New oligonucleotide conjugate useful in the treatment of e.g. cancers are  
XX telomerase inhibitors.  
XX  
XX Claim 12; Page 37; 45pp; English.  
XX  
XX The present invention relates to oligonucleotide conjugates where the  
XX oligonucleotide is covalently linked to an aromatic group. Compounds of  
XX the invention are used in medicine for inhibition of telomerase enzyme  
XX activity in cells (preferably expressed by tumour cells such as cells  
XX from cancer of the skin, central nervous system, retina and circulating  
XX tumours (e.g. leukaemia and lymphoma)). The present DNA sequence is an  
XX oligonucleotide used in conjugates of the invention  
XX  
XX Sequence 13 BP; 5 A; 1 C; 4 G; 3 T; 0 U; 0 Other;  
Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
OY 42 TTGTCCTAACCCCTA 54  
Db 13 TTGTCCTAACCCCTA 1  
RESULT 398  
ADB68045/c  
ID ADB68045 standard; RNA; 13 BP.  
XX  
XX ADB68045;  
XX  
XX 04-DEC-2003 (first entry)  
XX  
XX Match phosphorothioate modified 2'-O-methyl RNA G-core oligonucleotide.  
XX  
XX telomere length; aging; hyperproliferative condition; cancer ; ss;  
XX G-core.  
XX  
XX Unidentified.  
XX  
XX US2003096776-A1.  
XX  
XX 22-MAY-2003.  
XX  
XX 02-JAN-2002; 2002US-00038335.  
XX  
XX 29-SEP-1992; 92US-00954185.  
XX 29-SEP-1993; 93WO-US009297.  
XX 12-JUN-1995; 95US-00403888.  
XX 23-APR-1999; 99US-00299058.  
XX  
XX (ISIS-) ISIS PHARM INC.  
XX  
XX Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;  
XX

PI Ecker DJ, Vickers TA, Wyatt JR;  
 XX WPI; 2003-606442/57.  
 XX  
 XX New chemically modified oligonucleotides, useful for modulating telomere  
 XX length of a mammalian chromosome, inhibiting the division of a malignant  
 XX mammalian cell, or modulating the effects of aging of a mammalian cell.  
 XX  
 XX Example 5; Page 6; 10pp; English.  
 XX  
 XX The invention relates to a novel chemically modified oligonucleotide  
 XX having no more than about 27 nucleic acid base units. The oligonucleotide  
 XX modulates mammalian telomere length. The chemically modified  
 XX oligonucleotide of the invention may be useful for modulating the  
 XX telomere length of a mammalian chromosome, inhibiting the division of a  
 XX malignant mammalian cell or modulating the effects of aging of a  
 XX mammalian cell. The oligonucleotides may also be useful for treating  
 XX diseases associated with abnormal telomere length such as aging and  
 XX hyperproliferative conditions including cancer. The current sequence is  
 XX that of the "match" phosphorothioate modified 2'-O-methyl RNA G-core  
 XX oligonucleotide of the invention.  
 XX  
 XX Sequence 13 BP; 3 A; 1 C; 5 G; 0 T; 4 U; 0 Other;  
 XX  
 XX Query Match 2.9%; Score 13; DB 1; Length 13;  
 XX Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
 XX Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 XX  
 XX QY 46 CTAACCCCTAACTG 58  
 XX DB 13 CTAACCCCTAACTG 1  
 XX  
 XX RESULT 399  
 XX ADB68046/C  
 XX ID ADB68046 standard; DNA; 13 BP.  
 XX  
 XX AC ADB68046;  
 XX  
 XX DT 04-DEC-2003 (first entry)  
 XX  
 XX DE Match 2'-O-methyl oligonucleotide / peptide nucleic acid.  
 XX  
 XX KW telomere length; aging; hyperproliferative condition; cancer; ss; PNA;  
 XX KW peptide nucleic acid.  
 XX  
 XX OS Synthetic.  
 XX  
 XX FH Key Location/Qualifiers  
 XX modified\_base 1..13  
 XX FT /tag= b  
 XX FT /mod\_base= OTHER  
 XX FT /note= "OTHER = Optionally phosphorothioate backbone and  
 XX FT 2'-O-methyl sugar modification"  
 XX modified\_base 1  
 XX FT /tag= a  
 XX FT /mod\_base= OTHER  
 XX FT /note= "OTHER = Optionally linked to Gly residue"  
 XX modified\_base 13  
 XX FT /tag= c  
 XX FT /mod\_base= m5C, OTHER  
 XX FT /note= "OTHER = Optionally 5-methylcytosine or linked to  
 XX FT Lys residue"  
 XX  
 XX PN US2003096776-A1.  
 XX  
 XX PD 22-MAY-2003.  
 XX  
 XX PF 02-JAN-2002; 2002US-00038335.  
 XX  
 XX PR 29-SEP-1992; 92US-00954185.  
 XX PR 29-SEP-1993; 93WO-US009297.  
 XX PR 12-JUN-1995; 95US-00403888.

PR 23-APR-1999; 99US-00299058.  
 XX  
 XX PA (ISIS-) ISIS PHARM INC.  
 XX  
 XX PI Hanecak RC, Anderson KP, Bennett CF, Chiang M, Brown-Driver VL;  
 XX Ecker DJ, Vickers TA, Wyatt JR;  
 XX WPI; 2003-606442/57.  
 XX  
 XX New chemically modified oligonucleotides, useful for modulating telomere  
 XX length of a mammalian chromosome, inhibiting the division of a malignant  
 XX mammalian cell, or modulating the effects of aging of a mammalian cell.  
 XX  
 XX Example 5; Page 6; 10pp; English.  
 XX  
 XX The invention relates to a novel chemically modified oligonucleotide  
 XX having no more than about 27 nucleic acid base units. The oligonucleotide  
 XX modulates mammalian telomere length. The chemically modified  
 XX oligonucleotide of the invention may be useful for modulating the  
 XX telomere length of a mammalian chromosome, inhibiting the division of a  
 XX malignant mammalian cell or modulating the effects of aging of a  
 XX mammalian cell. The oligonucleotides may also be useful for treating  
 XX diseases associated with abnormal telomere length such as aging and  
 XX hyperproliferative conditions including cancer. The current sequence is  
 XX that of the "match" 2'-O-methyl oligonucleotide / peptide nucleic acid of  
 XX the invention.  
 XX  
 XX Sequence 13 BP; 3 A; 1 C; 5 G; 4 T; 0 U; 0 Other;  
 XX  
 XX Query Match 2.9%; Score 13; DB 1; Length 13;  
 XX Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
 XX Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 XX  
 XX QY 46 CTAACCCCTAACTG 58  
 XX DB 13 CTAACCCCTAACTG 1  
 XX  
 XX RESULT 400  
 XX ABZ58497/C  
 XX ID ABZ58497 standard; RNA; 13 BP.  
 XX  
 XX AC ABZ58497;  
 XX  
 XX DT 08-MAY-2003 (first entry)  
 XX  
 XX DE Telomerase inhibitor VI.  
 XX  
 XX KW Telomerase; inhibitor; hair growth; hirsutism; ss.  
 XX OS Synthetic.  
 XX  
 XX PN WO2003002077-A2.  
 XX  
 XX PD 09-JAN-2003.  
 XX  
 XX PF 12-JUN-2002; 2002WO-US018702.  
 XX  
 XX PR 27-JUN-2001; 2001US-00893252.  
 XX  
 XX PA (GILL ) GILLETTE CO.  
 XX  
 XX PI Styczynski P, Ahluwalia GS;  
 XX WPI; 2003-221439/21.  
 XX  
 XX PD Reducing mammalian hair growth comprises applying telomerase inhibitor to  
 XX selected skin area.  
 XX  
 XX PS Disclosure; Page 4; 13pp; English.  
 XX  
 XX CC The present sequence is that of telomerase inhibitor VI, an example a  
 XX telomerase inhibitor useful in the method of the invention for reducing

CC unwanted mammalian (human) hair growth. A composition comprising the  
CC telomerase inhibitor is applied to the skin to reduce hair growth. The  
CC telomerase inhibitor acts by reducing telomerase levels in hair  
CC follicles, reducing telomerase mRNA expression or by promoting the  
CC erosion of telomeric DNA. It can be used to reduce hair growth of a woman  
CC with hirsutism or to reduce androgen stimulated hair growth (both  
CC claimed). A composition comprising a telomerase inhibitor reduces hair  
CC growth by at least 15% (preferably 20%) when tested in the Golden Syrian  
CC Hamster assay  
XX  
SQ Sequence 13 BP; 3 A; 1 C; 5 G; 0 T; 4 U; 0 Other;

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAACTG 58  
Db 13 CTAACCCCTAACTG 1

RESULT 401  
ADM46660/c  
ID ADM46660 standard; DNA; 13 BP.  
XX  
AC ADM46660;  
XX  
DT 01-JUL-2004 (first entry)  
XX  
DE Telomerase template region complementary oligonucleotide SEQ ID NO:3.  
XX  
KW ss; telomerase; hTR; template region; cytostatic; telomerase inhibition;  
KW cancer; tumour.  
XX  
OS Synthetic.  
XX  
PN WO2004029277-A2.  
XX  
PD 08-APR-2004.  
XX  
PF 23-SEP-2003; 2003WO-US029730.  
XX  
PR 25-SEP-2002; 2002US-00255535.  
XX  
PA (GERO-) GERON CORP.  
XX  
PI Gryaznov S, Pongracz K, Tolman RL, Morin GB;  
XX WPI; 2004-329894/30.  
XX

Novel covalent oligonucleotide conjugates comprising nucleobase and  
PT oligonucleotide exactly complementary to sequence within template region  
PT of human telomerase RNA, linked through linker, useful as medicine for  
PT treating cancer.

PS Disclosure; SEQ ID NO 3; 50pp; English.

CC The invention relates to a novel compound having telomerase inhibition  
CC activity, comprising a nucleobase (A) and oligonucleotide (O) containing  
CC a sequence of 2-11 nucleotides exactly complementary to a sequence within  
CC the template region of human telomerase RNA, linked through a linker (L).  
CC A compound of the invention has cytostatic activity. The compound is  
CC useful for inhibiting the activity of telomerase enzyme, which involves  
CC contacting the telomerase with the compound. The compound of the  
CC invention is also useful for inhibiting the proliferation of the cell  
CC which involves contacting the cell with the compound. The cell is  
CC preferably a cancer cell. The compound is useful as a medicine for  
CC treating cancer. The compound is useful for inhibiting or reducing  
CC telomerase enzyme activity and/or proliferation of cells having  
CC telomerase activity e.g., tumour cells. The telomerase-positive tumour  
CC cells are from cancer of the skin, connective tissue, adipose, breast,  
CC lung, stomach, pancreas, ovary, cervix, uterus, kidney, bladder, colon,  
CC prostate, central nervous system (CNS), retina and circulating tumours

CC (such as leukaemia and lymphoma). The present sequence represents an  
CC oligonucleotide of the invention.  
XX  
SQ Sequence 13 BP; 5 A; 1 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGTCTAACCCCTA 54  
Db 13 TTGTCTAACCCCTA 1

RESULT 402  
ADO21607/c  
ID ADO21607 standard; DNA; 13 BP.  
XX  
AC ADO21607;  
XX  
DT 15-JUL-2004 (first entry)  
XX  
DE Labelled nucleic acid/11C-related PNA-antisense oligo 2.  
XX  
KW labelled nucleic acid manufacture; 11C; sensitive detection;  
KW PNA-antisense; ss.  
XX  
OS Unidentified.

PH Key Location/Qualifiers  
FT modified\_base 1  
FT /\*tag= a  
FT /mod\_base= OTHER  
FT /note= "OTHER = Optionally attached to C3H711CONH group"

XX JP2004123542-A.

XX 22-APR-2004.

XX 30-AUG-2002; 2002JP-00254671.

XX 30-AUG-2002; 2002JP-00254671.

XX (NIKL ) JAPAN STEEL WORKS LTD.

XX WPI; 2004-368480/35.

XX Manufacturing labeled nucleic acid, by introducing carbon-11 to  
PT transduction region, and contacting nucleic acid fragment and carbon-11  
PT compound.

XX Example 2; Fig 7; 17pp; Japanese.

CC The invention relates to a novel method for manufacturing a labelled  
CC nucleic acid which comprises introducing an 11C to the transduction  
CC region and contacting the nucleic acid fragment and 11C compound, where  
CC the nucleic acid fragment is a polynucleic acid or peptide nucleic acid.  
CC The method of the invention may be useful for manufacturing a labelled  
CC nucleic acid and provides sensitive detection of a target mRNA, such as  
CC neuroglia myofibril acidic protein (GFAP). The current sequence is that  
CC of the labelled nucleic acid/11C-related PNA-antisense oligo 2 of the  
CC invention.

XX Sequence 13 BP; 3 A; 1 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 2.8e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAACTG 58  
Db 13 CTAACCCCTAACTG 1





XX 14-APR-2000; 2000US-0197838P.  
XX (GENA-) GENAISSANCE PHARM INC.  
XX Bentivegna SC, Chew A, Choi JY, Denton RR, Nandabalan K;  
XX WPI; 2002-066341/09.  
XX  
XX Genotyping human galanin receptor gene of an individual for determining  
XX haplotype of an individual, involves determining the identity of  
XX nucleotide pair at specific polymorphic sites for two copies of the gene.  
XX  
XX Claim 16; Page 15; 99pp; English.  
XX  
XX The invention relates to genotyping human galanin receptor (GALR1) gene  
XX of an individual, involving determining for the two copies of the GALR1  
XX gene present in the individual, the identity of the nucleotide pair at  
XX one or more polymorphic sites. The method is useful for determining  
XX whether an individual has a haplotype or haplotype pairs defined in the  
XX specification. This is useful for improving the efficacy and reliability  
XX of several steps in the discovery and development of drugs for treating  
XX diseases associated with GALR1 activity, e.g., infectious diarrhoea and  
XX growth hormone deficiency, to validate GALR1 as a candidate agent for  
XX treating a specific condition or disease predicted to be associated with  
XX GALR1 activity, and in the design of clinical trials of candidate drugs  
XX for treating a specific condition or disease predicted to be associated  
XX with GALR1 activity. The method is useful to screen for compounds  
XX targeting GALR1 to treat a specific conditions or disease associated with  
XX GALR1 activity. A GALR1 polynucleotide or variant is useful in studying  
XX the expression and function of GALR1, and in expressing GALR1 protein for  
XX use in screening for candidate drugs to treat diseases related to GALR1  
XX activity. The polynucleotide or variant is useful for studying expression  
XX of the GALR1 isogenes in vivo, for in vivo screening and testing of drugs  
XX targeted against GALR1 protein, and for studying the effect of the  
XX variation on the biological activity of GALR1 as well as on the binding  
XX affinity of candidate drugs targeting GALR1 for the treatment of  
XX infectious diarrhoea and growth hormone insufficiency. AAS98408  
XX represent human GALR1 gene allele-specific oligonucleotides used to  
XX detect GALR1 gene polymorphisms as described in the method of the  
XX invention  
XX  
XX Sequence 15 BP; 2 A; 3 C; 9 G; 0 T; 0 U; 1 Other;  
SQ  
Query Match 2.9%; Score 13; DB 1; Length 15;  
Best Local Similarity 86.7%; Pred. No. 3.4e+02;  
Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
Qy 82 TTGCTCCCGCGCGC 96  
Db 15 TYCCTCCCGCGCGC 1  
RESULT 408  
ABK97507  
ID ABK97507 standard; DNA; 15 BP.  
XX  
XX AC  
XX ABK97507;  
XX  
XX DT 07-OCT-2002 (first entry)  
XX  
XX DE Human LCAT gene polymorphism detection ASO primer #16.  
XX  
XX KW Lecithin-cholesterol acyltransferase; LCAT; Norum disease; gene therapy;  
XX fish-eye disease; atherosclerotic cardiovascular disease; forensic;  
XX population diversity; anthropological lineage; paternity testing; human;  
XX polymorphism; allele-specific oligonucleotide; ASO; PCR; primer; ss.  
XX  
XX OS Homo sapiens.  
XX  
XX PN WO200253575-A1.  
XX  
XX PD 11-JUL-2002.  
XX  
XX 03-JAN-2001; 2001WO-US000092.  
XX  
XX 03-JAN-2001; 2001WO-US000092.  
XX  
XX (GENA-) GENAISSANCE PHARM INC.  
XX  
XX Chew A, Denton RR, Nandabalan K, Stephens JC;  
XX WPI; 2002-557737/59.  
XX  
XX Novel isolated polymorphic variant polynucleotide of lecithin-cholesterol  
XX acyltransferase gene, useful for studying expression and biological  
XX function of the gene, and for therapeutic, diagnostic or forensic  
XX purposes.  
XX  
XX Claim 16; Page 17; 72pp; English.  
XX  
XX The present invention relates to a new polynucleotide comprising a  
XX nucleotide sequence which is a polymorphic variant of a reference  
XX sequence for lecithin-cholesterol acyltransferase (LCAT). The invention  
XX is useful for identifying an association between a trait (preferably a  
XX clinical response to drug targeting LCAT) and at least one genotype or  
XX haplotype of LCAT gene. The method of the invention has applicability in  
XX developing diagnostic tests and therapeutic treatments for Norum disease,  
XX fish-eye disease and atherosclerotic cardiovascular disease. The  
XX haplotyping and genotyping methods are useful for studying population  
XX diversity, anthropological lineage, the significance of diversity and  
XX lineage at the phenotypic level, paternity testing, forensic applications  
XX and for identifying association between the LCAT genetic variation and a  
XX trait such as level of drug response or susceptibility to disease. In  
XX addition, the methods for identifying the LCAT haplotypes present in  
XX individuals are useful in the development of drugs targeting LCAT. For  
XX example, determining the frequency of individual LCAT haplotypes in a  
XX population with a specific disease, e.g. Norum disease, will facilitate  
XX the development of drugs targeting the LCAT isoform(s) that are most  
XX frequent in that disease population. The present nucleic acid sequence  
XX represents one of a collection (ABK97492-ABK97519) of allele-specific  
XX oligonucleotide (ASO) primers that were used in the invention to detect  
XX polymorphisms in the human LCAT gene  
XX  
XX Sequence 15 BP; 3 A; 8 C; 2 G; 2 T; 0 U; 0 Other;  
SQ  
Query Match 2.9%; Score 13; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 3.4e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 284 CACCCACTGCCAC 296  
Db 2 CACCCACTGCCAC 14  
RESULT 409  
ADG98425/C  
ID ADG98425 standard; DNA; 15 BP.  
XX  
XX AC ADG98425;  
XX  
XX DT 11-MAR-2004 (first entry)  
XX  
XX DE Human CETP gene allele specific oligonucleotide probe #54.  
XX  
XX KW human; cholesteryl ester transfer protein; CETP;  
XX single nucleotide polymorphism; SNP; drug screening; atherosclerosis;  
XX cardiovascular disease; hypercholesterolaemia;  
XX allele specific oligonucleotide; ss; probe.  
XX  
XX OS Homo sapiens.  
XX  
XX PN WO2003091277-A2.  
XX  
XX PD 06-NOV-2003.  
XX

PF 28-APR-2003; 2003WO-US013288.  
 XX  
 PR 26-APR-2002; 2002US-0375791P.  
 XX  
 PA (GENA-) GENAISSANCE PHARM INC.  
 PI Anastasio AE, Chew A, Kazemi A, Lachowicz M, Lee HH, Parks KE;  
 PI Petersen N, Rounds E, Sausker EA, Tirrell C;  
 XX WPI; 2003-865576/80.  
 XX  
 PT New isolated polynucleotide useful for haplotyping and/or genotyping  
 PT cholesteryl ester transfer protein (CETP) gene in an individual or in  
 PT screening for drugs useful in treating diseases associated with CETP  
 PT activity.  
 XX  
 PS Claim 43; SEQ ID NO 57; 250pp; English.  
 XX  
 CC The invention comprises the amino acid and coding sequences of the human  
 CC cholesteryl ester transfer protein (CETP), the invention also comprises  
 CC polymorphisms identified within the CETP gene. The DNA and protein  
 CC sequences of the invention are useful in haplotyping and/or genotyping  
 CC the CETP gene in an individual. The DNA and protein sequences may also be  
 CC used to screen drugs or compounds targeting the CETP or its variant to  
 CC treat a condition or disease associated with CETP (e.g. atherosclerosis,  
 CC cardiovascular disease or hypercholesterolemia). The present DNA  
 CC sequence represents an allele specific oligonucleotide probe for the  
 CC human CETP gene.  
 XX  
 SQ Sequence 15 BP; 4 A; 4 C; 5 G; 1 T; 0 U; 1 Other;  
  
 Query Match 2.9%; Score 13; DB 1; Length 15;  
 Best Local Similarity 86.7%; Pred. No. 3.4e+02;  
 Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
  
 QY 310 GCTCTGTGAGCGCG 324  
 Db |||||:|||||  
 15 GCTCTGTGAGCGCTCG 1  
  
 RESULT 410  
 AAT14404  
 ID AAT14404 standard; DNA; 16 BP.  
 AC AAT14404;  
 XX  
 DT 05-AUG-1996 (first entry)  
 XX  
 DE PRRSV sequencing primer Dp966.  
 XX  
 KW Porcine reproductive and respiratory syndrome virus; PRRSV; vaccine;  
 KW antigen; polymerase chain reaction; PCR; primer; ss.  
 XX  
 OS Synthetic.  
 XX  
 PN WO9606619-A1.  
 XX  
 PD 07-MAR-1996.  
 XX  
 PF 01-SEP-1995; 95WO-US010904.  
 XX  
 PR 01-SEP-1994; 94US-00301435.  
 XX  
 PA (PAUL/) PAUL P S.  
 PA (MENG/) MENG X.  
 PA (HALB/) HALBUR P.  
 PA (MORO/) MOROZOV I.  
 PA (LUMM/) LUM M A.  
 XX  
 PI Paul PS, Meng X, Halbur P, Morozov I, Lum MA;  
 XX WPI; 1996-160132/16.  
 DR  
 XX

PT New porcine reproductive and respiratory syndrome virus DNA - and  
 PT proteins encoded by open reading frames of an Iowa strain of the virus;  
 PT are used in vaccines against PRRSV in pigs.  
 XX  
 PS Disclosure; Page 77; 228pp; English.  
 XX  
 CC Primer Dp966 (AAT14404) is specific to porcine reproductive and  
 CC respiratory syndrome virus (PRRSV). It was used with other sequencing  
 CC primers (AAT14381-82) to determine the sequences of the putative membrane  
 CC (M) and nucleocapsid (N) genes of PRRSV isolate ISU-12 (see also AAT14391  
 CC -92) and of 5 other American PRRSV isolates (AAT14405-09) and European  
 CC strain Lelystad (AAT14410)  
 XX  
 SQ Sequence 16 BP; 2 A; 4 C; 6 G; 4 T; 0 U; 0 Other;  
  
 Query Match 2.9%; Score 13; DB 1; Length 16;  
 Best Local Similarity 100.0%; Pred. No. 3.6e+02;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
 QY 268 GGGGCTTCTCCGG 280  
 Db |||||:|||||  
 4 GGGGCTTCTCCGG 16  
  
 RESULT 411  
 AAF01709/c  
 ID AAF01709 standard; DNA; 17 BP.  
 XX  
 AC AAF01709;  
 XX  
 DT 16-FEB-2001 (first entry)  
 XX  
 DE Hammerhead ribozyme substrate #4.  
 XX  
 KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;  
 KW interferon alpha; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200061729-A2.  
 XX  
 PD 19-OCT-2000.  
 XX  
 PF 11-APR-2000; 2000WO-US009721.  
 XX  
 PR 12-APR-1999; 99US-0129390P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 PI Blatt L, Zwick M, Pavco P, Mcswiggen J;  
 XX WPI; 2000-647423/62.  
 DR  
 XX  
 PS Enzymatic and antisense nucleic acid inhibition of repressor genes,  
 PT useful for producing e.g. granulocyte colony stimulating factor protein,  
 PT interferon alpha and erythropoietin.  
 XX  
 PS Claim 37; Page 56; 164pp; English.  
 XX  
 CC The present invention relates to enzymatic and antisense nucleic acid  
 CC molecules that act as inhibitors of the expression of repressor genes  
 CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription  
 CC factor gene, IRF-2 and/or the CAAT Displacement Protein (CDP).  
 CC Inhibition of the repressors removes prevents inhibition (and  
 CC consequently increases expression of) genes involved in the production of  
 CC erythropoietin, granulocyte colony stimulating factor protein and  
 CC interferon alpha  
 XX  
 SQ Sequence 17 BP; 5 A; 9 C; 2 G; 1 T; 0 U; 0 Other;  
  
 Query Match 2.9%; Score 13; DB 1; Length 17;  
 Best Local Similarity 100.0%; Pred. No. 3.9e+02;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;



Qy 2 GGTTCGGAGGGT 14  
 Db 16 GGTTCGGAGGGT 4  
  
 RESULT 412  
 ABZ62076/C  
 ID ABZ62076 standard; RNA; 17 BP.  
 XX  
 AC ABZ62076;  
 XX  
 DT 21-MAR-2003 (first entry)  
 XX  
 DE Human H-Ras DNAzyme target #867.  
 XX  
 KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;  
 KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosolic; anti-HIV;  
 KW anti-rheumatic; cancer; AIDS; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200297114-A2.  
 XX  
 PD 05-DEC-2002.  
 XX  
 PF 29-MAY-2002; 2002WO-US016840.  
 XX  
 PR 29-MAY-2001; 2001US-0294140P.  
 PR 06-JUN-2001; 2001US-0296249P.  
 PR 10-SEP-2001; 2001US-0318471P.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 XX  
 PI Mcswiggen J;  
 XX  
 DR WPI; 2003-140484/13.  
 XX  
 PT Novel short interfering RNA and enzymatic nucleic acid useful for  
 PT treating cancer, modulates the expression of a nucleic acid encoding  
 PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.  
 XX  
 PS Claim 58; Page 129; 185pp; English.  
 XX  
 CC The invention relates to a novel short interfering RNA (siRNA) nucleic  
 CC acid molecule or an enzymatic nucleic acid molecule, that modulates  
 CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,  
 CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic  
 CC acid molecule of the invention has cytosolic, anti-HIV, and anti-  
 CC rheumatic activity. The nucleic acid molecules are useful for reducing  
 CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are  
 CC also useful for treating breast, ovarian, colorectal, lung, prostate,  
 CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences  
 CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,  
 CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human  
 CC ribozymes of the invention  
 XX  
 SQ Sequence 17 BP; 1 A; 4 C; 10 G; 0 T; 2 U; 0 Other;  
  
 Query Match 2.9%; Score 13; DB 1; Length 17;  
 Best Local Similarity 100.0%; Pred. No. 3.9e+02;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
 Qy 225 CCTGCCAGCCCC 237  
 Db 13 CCTGCCAGCCCC 1  
  
 RESULT 413  
 AAT80369  
 ID AAT80369 standard; DNA; 16 BP.  
 XX  
 AC AAT80369;

XX 16-OCT-1997 (first entry)  
 DT  
 XX  
 DE Oligo HCV-222, multiplex forming oligomer.  
 XX  
 KW Complementary; 5' untranslated region; UTR; hepatitis C virus; HCV;  
 KW inhibition; replication; expression; detection; chronic hepatitis;  
 KW acute hepatitis; hepatocarcinoma; ss.  
 XX  
 OS Synthetic.  
 XX  
 PH Key Location/Qualifiers  
 FT modified\_base 1..11  
 FT /\*tag= a  
 FT /note= "2'-OMe RNA"  
 FT modified\_base 12..16  
 FT /\*tag= b  
 FT /note= "Comprises phosphorothioate linkages"  
 XX  
 PN WO9639500-A2.  
 XX  
 PD 12-DEC-1996.  
 XX  
 PF 04-JUN-1996; 96WO-EP002427.  
 XX  
 PR 06-JUN-1995; 95US-00471968.  
 XX  
 PA (HOFF ) HOFFMANN LA ROCHE & CO AG F.  
 PA (HYBR-) HYBRIDON INC.  
 XX  
 PI Frank BL, Goodchild J, Hamlin HA, Kilkuskie RE, Roberts NA;  
 PI Roberts PC, Walther DM, Wolfe JL;  
 XX  
 DR WPI; 1997-043122/04.  
 XX  
 PT Oligo:nucleotide(s) complementary to HCV 5' untranslated region - used in  
 PT the treatment and detection of HCV infection, esp. hepatitis and hepato-  
 PT carcinoma.  
 XX  
 PS Claim 28; Page 22; 100pp; English.  
 XX  
 CC The sequences given in AAT80211-382 represent synthetic oligonucleotides  
 CC which are complementary to a portion of the 5' untranslated region (UTR)  
 CC of hepatitis C virus (HCV). These sequences may be used in a  
 CC pharmaceutical composition for the control or prevention of HCV  
 CC infection. They may be used to inhibit replication or expression of HCV  
 CC or for detecting the presence of HCV in a sample. They may be used to  
 CC inhibit HCV replication in a cell and are therefore useful in the  
 CC treatment of HCV infections such as chronic and acute hepatitis and  
 CC hepatocarcinoma. This sequence forms multiplex binding complexes with  
 CC regions of the HCV genome. This sequence forms a duplex at the region -  
 CC 218 to -227 and forms a purine strand triplex at the region -212 to -222  
 XX  
 SQ Sequence 16 BP; 0 A; 7 C; 6 G; 2 T; 1 U; 0 Other;  
  
 Query Match 2.8%; Score 12.8; DB 1; Length 16;  
 Best Local Similarity 81.2%; Pred. No. 3.8e+02;  
 Matches 13; Conservative 1; Mismatches 2; Indels 0; Gaps 0;  
  
 Qy 199 CCCTCCCGGGGACCTG 214  
 Db 1 CCCUCCGGGGTCTG 16  
  
 RESULT 414  
 AAC73638  
 ID AAC73638 standard; DNA; 16 BP.  
 XX  
 AC AAC73638;  
 XX  
 DT 02-FEB-2001 (first entry)  
 XX  
 DE Reverse primer #142 used in multiplexing PCR/SBE assay.

```
XX Oligonucleotide array; genotyping; single base extension reaction; SBE;
KW PCR primer; polymorphic locus; single nucleotide polymorphism; ss.
XX Unidentified.
XX WO200058516-A2.
XX
XX 05-OCT-2000.
XX
XX 27-MAR-2000; 2000WO-US008069.
XX
XX 26-MAR-1999; 99US-0126473P.
XX 23-JUN-1999; 99US-0140359P.
XX (WHEED ) WHITEHEAD INST BIOMEDICAL RES.
XX (AFFY-) AFFYMETRIX INC.
XX
XX Fan J, Hirschhorn JN, Huang X, Kaplan P, Lander ES, Lockhart DJ;
XX Ryder T, Sklar P;
XX WPI; 2000-656171/63.
XX
XX Universal array of oligonucleotides tags attached to a solid substrate
XX along with locus-specific tagged oligonucleotides useful in genotyping
XX using single base extension reactions.
XX Example 7; Page 63; 70pp; English.
XX
XX The present invention relates to an oligonucleotide array comprising
XX oligonucleotide tags fixed to a solid substrate. The oligonucleotide
XX array is useful for genotyping a nucleic acid sample at one or more loci
XX via single base extension (SBE) reactions. A pair of primers is used to
XX amplify a polymorphic locus in a sample e.g. a single nucleotide
XX polymorphism (SNP). The present sequence is one of the primers used in
XX the method of the present invention to amplify a polymorphic sample. The
XX amplified nucleic acid product is then used as a template in a SBE
XX reaction with an extension primer. The SBE reaction products are used to
XX form the oligonucleotide array
XX
XX Sequence 16 BP; 2 A; 2 C; 8 G; 4 T; 0 U; 0 Other;
Query Match 2.8%; Score 12.8; DB 1; Length 16;
Best Local Similarity 87.5%; Pred. No. 3.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 24 AGGGTGGTGGCCATT 39
Db 1 AGGGTGGTGGCCAGT 16
RESULT 415
ABSE5953
ID ABSE5953 standard; DNA; 16 BP.
XX
XX AC ABSE5953;
XX
XX 15-NOV-2002 (first entry)
XX
XX Inhibitory oligonucleotide specific for hepatitis C virus #159.
XX
XX Hepatitis C virus; HCV; hepatocyte infection; non-A hepatitis;
XX non-B hepatitis; acute hepatitis; chronic hepatitis;
XX hepatocellular carcinoma; virucide; cytostatic; antisense therapy;
XX gene therapy; ss; DNA-RNA hybrid.
XX
XX Synthetic.
XX
XX US2002081577-A1.
XX
XX 27-JUN-2002.
XX
XX 02-JUL-1997; 97US-00887505.
```

```
XX 06-JUN-1995; 95US-00471968.
XX 02-JUL-1996; 96US-0021104P.
XX (KILK/) KILKUSKIE R L.
XX (FRAN/) FRANK B L.
XX (GOOD/) GOODCHILD J.
XX (WOLF/) WOLFE J L.
XX (ROBE/) ROBERTS P C.
XX (HAML/) HAMLIN H A.
XX (ROBE/) ROBERTS N A.
XX (WALT/) WALTHER D M.
XX
XX Kilkuskie RL, Frank BL, Goodchild J, Wolfe JL, Roberts PC;
XX Hamlin HA, Roberts NA, Walthers DM;
XX WPI; 2002-537132/57.
XX
XX Synthetic oligonucleotides complementary to a portion of the 5'
XX untranslated region of hepatitis C virus (HCV), useful for diagnosing and
XX treating HCV infections and hepatocellular carcinoma.
XX Claim 31; Page 7; 74pp; English.
XX
XX The invention describes synthetic oligonucleotides complementary to a
XX portion of the 5' untranslated region of hepatitis C virus. The
XX oligonucleotides may be used in methods for controlling, preventing, and
XX treating hepatitis C virus infection, in antisense technology and gene
XX therapy, and of detecting the presence of hepatitis C virus in a sample.
XX Hepatitis C virus (HCV) is an enveloped, positive sense, single-stranded
XX RNA virus which infects hepatocytes. HCV is the major cause of non-A, non
XX -B, acute and chronic hepatitis, and has been associated with
XX hepatocellular carcinoma. The invention describes methods and kits for
XX inhibiting replication of HCV, inhibiting the expression of HCV nucleic
XX acid and protein, and for treating HCV infections. This sequence
XX represents a synthetic DNA-RNA hybrid oligonucleotide used for inhibiting
XX HCV replication and expression of HCV
XX
XX Sequence 16 BP; 0 A; 7 C; 6 G; 2 T; 1 U; 0 Other;
Query Match 2.8%; Score 12.8; DB 1; Length 16;
Best Local Similarity 81.2%; Pred. No. 3.8e+02;
Matches 13; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
QY 199 CCTCTCCCGGGGACCTG 214
Db 1 CCCUCGGGGGTCTTG 16
RESULT 416
ABT34275/c
ID ABT34275 standard; DNA; 16 BP.
XX
XX AC ABT34275;
XX
XX 12-JUN-2003 (first entry)
XX
XX Serotonin receptor 1D probe SEQ ID No 61.
XX
XX Eating disorder; polymorphism; dataset; allele; HGBASE identification;
XX serotonin receptor 1D; delta-opioid receptor; dopamine receptor D2;
XX anorexia nervosa; bulimia nervosa; probe; ss.
XX
XX Unidentified.
XX
XX WO2003012143-A1.
XX
XX 13-FEB-2003.
XX
XX 16-JUL-2002; 2002WO-US022555.
XX
XX 16-JUL-2001; 2001US-0305153P.
XX 20-JUL-2001; 2001US-0306440P.
```

PR 13-NOV-2001; 2001US-0331285P.  
PR 19-DEC-2001; 2001US-0340843P.  
PR 19-DEC-2001; 2001US-0340844P.  
XX (PRIC-) PRICE FOUND LTD.  
XX Bergen AW, Yeager M;  
XX WPI; 2003-268122/26.  
XX New nucleic acid molecule having polymorphisms in the serotonin receptor  
PT 1D, delta-opioid receptor, or dopamine receptor D2, useful in diagnostic  
PT and prognostic assays for eating disorders, such as anorexia and bulimia  
PT nervosa.  
XX  
XX Example 3; Page 60; 149pp; English.  
XX  
XX The invention relates to a novel isolated nucleic acid molecule  
CC comprising a variant gene associated with an eating disorder and selected  
CC from any of 119 polymorphisms with their corresponding genotyping in  
CC dataset, alleles and HGBASE identification, given in the specification.  
CC The novel nucleic acid molecule has polymorphisms in the serotonin  
CC receptor 1D, delta-opioid receptor, or dopamine receptor D2, which is  
CC useful in diagnostic and prognostic assays for eating disorders, in  
CC particular anorexia nervosa and bulimia nervosa. This polynucleotide  
CC sequence represents a serotonin receptor 1D probe of the invention  
XX  
XX Sequence 16 BP; 4 A; 10 C; 2 G; 0 T; 0 U; 0 Other;  
SQ  
Query Match 2.8%; Score 12.8; DB 1; Length 16;  
Best Local Similarity 87.5%; Pred. No. 3.8e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 2 GGTTCGGAGGCTGGG 17  
DB 16 GCTTGGCGTGGTGGG 1  
RESULT 417  
ADN14388/C  
ID ADN14388 standard; DNA; 16 BP.  
AC ADN14388;  
XX  
XX 15-JUL-2004 (first entry)  
XX Pyrimidine nucleotide flanking sequence 3.  
XX ss; RNA complex; immunosuppressive; cytostatic; cancer;  
KW systemic lupus erythematosus; Alzheimer's; Huntington's disease;  
KW salivary gland carcinoma; melanoma; brain tumour; leukaemia; lymphoma;  
KW gene therapy.  
XX  
XX Synthetic.  
OS  
XX WO2004035765-A2.  
XX  
XX 29-APR-2004.  
XX  
XX 20-OCT-2003; 2003WO-US033466.  
XX  
XX 18-OCT-2002; 2002US-0419532P.  
XX  
XX 28-OCT-2002; 2002US-0421757P.  
XX  
XX (NUCL-) NUCLEONICS INC.  
XX  
XX Pachuk CJ, Satischandran C, McCallus DE;  
XX WPI; 2004-348454/32.  
XX  
XX New substantially pure ribonucleic acid (RNA) complex comprising a first  
PT strand and a second strand that hybridize to each other, useful for  
PT treating cancer, systemic lupus erythematosus, Alzheimer's disease or  
PT

PT Huntington's disease.  
XX Example 9; Page 119; 204pp; English.  
XX  
XX This invention relates to double stranded ribonucleic acid (RNA)  
CC structures and constructs. Specifically, it comprises first and second  
CC RNA strands that hybridize to each other, under physiological conditions  
CC to form a double-strand region, wherein the double-strand region contains  
CC one or more mismatched regions that result in two or more double-stranded  
CC segments. Furthermore, the mismatched regions may be cleaved by single-  
CC strand ribonuclease enzymes. The present invention describes expression  
CC vectors that encode dsRNAs with an intron containing exemplary target  
CC genes such as antibiotic resistance genes. Accordingly, using gene  
CC therapy, these RNA complexes exhibit immunosuppressive and cytostatic  
CC activities and can be used to treat cancer, systemic lupus erythematosus,  
CC Alzheimer's and Huntington's disease. The cancer is selected from,  
CC amongst others, prostate, breast, ovarian, salivary gland carcinoma,  
CC melanoma, brain tumour, leukaemia and lymphoma. This oligonucleotide  
CC sequence is a DNA flanking sequence used in an exemplification of the  
CC invention.  
XX  
XX Sequence 16 BP; 0 A; 10 C; 0 G; 6 T; 0 U; 0 Other;  
SQ  
Query Match 2.8%; Score 12.8; DB 1; Length 16;  
Best Local Similarity 87.5%; Pred. No. 3.8e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 370 GAAGAGGACGCGCG 385  
DB 16 GAAGAGGAGGGAGGG 1  
RESULT 418  
AAT12444  
ID AAT12444 standard; DNA; 17 BP.  
XX AAT12444;  
XX  
XX 17-SEP-1996 (first entry)  
XX Antiviral phosphorothioate oligonucleotide #27.  
XX Antiviral, phosphorothioate; mRNA 4; mRNA 5; herpes simplex virus 1; HSV;  
KW viral infection; HIV; varicella zoster virus; VZV; therapy; ss.  
XX Synthetic.  
OS  
XX Key Location/Qualifiers  
FH modified\_base 1..17  
FT /\*tag= a  
FT /note= "phosphorothioate oligonucleotides"  
XX  
XX WO9603500-A1.  
XX  
XX 08-FEB-1996.  
XX  
XX 25-JUL-1995; 95WO-JP001472.  
XX  
XX 26-JUL-1994; 94JP-00173862.  
XX  
XX 01-NOV-1994; 94JP-00268603.  
XX  
XX (LTTL-) LTT INST CO LTD.  
XX (KAKE) KAKEN PHARM CO LTD.  
XX  
XX Shoji Y, Shimada J, Mizushima Y, Iwatani W, Tamura N;  
XX WPI; 1996-117045/12.  
XX  
XX Antiviral phosphorothioate oligonucleotide(s) - active against e.g.  
PT herpes simplex virus 1, HIV and varicella zoster virus.  
XX  
XX Claim 6; Page 150; 163pp; Japanese.  
XX  
XX

CC AAT12435-T12454 represent phosphorothioate oligonucleotides with  
 CC antiviral activity. These sequences, and the phosphorothioate  
 CC oligonucleotides represented by AAT12418-T12434 (which are complementary  
 CC to regions of the mRNA 4 or 5 of herpes simplex virus 1 (HSV)), are  
 CC effective in the prevention and treatment of viral infection. The  
 CC sequences are especially effective against infection by HSV, HIV or  
 CC varicella zoster virus (VZV)

SQ Sequence 17 BP; 0 A; 2 C; 15 G; 0 T; 0 U; 0 Other;  
 Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 333 GGGGGCGAGGCGGAGG 348  
 Db 1 GGGGGCGGCGGCGGG 16  
 ||||| ||||| ||

RESULT 419  
 AAT12443  
 ID AAT12443 standard; DNA; 17 BP.  
 XX AAT12443;  
 AC AAT12443;  
 XX 17-SEP-1996 (first entry)  
 DT  
 XX Antiviral phosphorothioate oligonucleotide #26.  
 DE  
 XX Antiviral; phosphorothioate; mRNA 4; mRNA 5; herpes simplex virus 1; HSV;  
 KW viral infection; HIV; varicella zoster virus; VZV; therapy; ss.  
 KW  
 XX Synthetic.  
 OS  
 XX  
 XX  
 PH Key Location/Qualifiers  
 FT modified\_base 1..17  
 FT /\*tag= a  
 FT /note= "phosphorothioate oligonucleotides"  
 FT  
 XX  
 XX WO9603500-A1.  
 PN  
 XX 08-FEB-1996.  
 PD  
 XX 25-JUL-1995; 95WO-JP001472.  
 PF  
 XX 26-JUL-1994; 94JP-00173862.  
 PR  
 XX 01-NOV-1994; 94JP-00268603.  
 PR  
 XX (LTTL-) LTT INST CO LTD.  
 PA (KAKE ) KAKEN PHARM CO LTD.  
 XX  
 XX Shoji Y, Shimada J, Mizushima Y, Iwatani W, Tamura N;  
 PI WPI; 1996-117045/12.  
 DR  
 XX Antiviral phosphorothioate oligo:nucleotide(s) - active against e.g.  
 PT herpes simplex virus 1, HIV and varicella zoster virus.  
 PT  
 XX Claim 6; Page 150; 163pp; Japanese.  
 PS  
 XX AAT12435-T12454 represent phosphorothioate oligonucleotides with  
 CC antiviral activity. These sequences, and the phosphorothioate  
 CC oligonucleotides represented by AAT12418-T12434 (which are complementary  
 CC to regions of the mRNA 4 or 5 of herpes simplex virus 1 (HSV)), are  
 CC effective in the prevention and treatment of viral infection. The  
 CC sequences are especially effective against infection by HSV, HIV or  
 CC varicella zoster virus (VZV)

SQ Sequence 17 BP; 0 A; 3 C; 14 G; 0 T; 0 U; 0 Other;  
 Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 332 CGGGGGCGAGGCGGAG 347  
 Db 2 CGGGGGCGGCGGCGGG 17  
 ||||| ||||| |||||

RESULT 420  
 AAX62953  
 ID AAX62953 standard; RNA; 17 BP.  
 XX AAX62953;  
 AC AAX62953;  
 XX 16-JUL-1999 (first entry)  
 DT  
 XX Delta-9 desaturase hamerhead ribozyme target SEQ ID NO:828.  
 DE  
 XX Maize; corn; Zea mays; delta-9 desaturase; GBSS; target; substrate;  
 KW granule bound starch synthase; hamerhead ribozyme; hairpin ribozyme;  
 KW modulation; gene expression; transgenic plant; cleavage; canola plant;  
 KW caffeine synthesis; coffee plant; nicotine production; tobacco;  
 KW fruit ripening; flower pigmentation; lignin production; ss.  
 KW  
 XX Zea mays.  
 OS  
 XX WO9710328-A2.  
 PN  
 XX 20-MAR-1997.  
 PD  
 XX 12-JUL-1996; 96WO-US011689.  
 PF  
 XX 13-JUL-1995; 95US-0001135P.  
 PR  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA (DOWC ) DOWELANCO.  
 XX  
 XX Zwick MG, Edington BE, Mcswiggen JA, Merlo PAO, Guo L, Skokut TA;  
 PI Young SA, Folkerts O, Merlo DJ;  
 XX WPI; 1997-202224/18.  
 DR  
 XX Ribozyme which modulates plant gene expression - preferably modulates  
 PT expression of DELTA-9 desaturase or granule bound starch synthase in  
 PT maize or canola.  
 PT  
 XX Claim 38; Page 86; 155pp; English.  
 PS  
 XX The present invention describes an enzymatic nucleic acid molecule (I)  
 CC with RNA cleaving activity, which modulates the expression of a plant  
 CC gene. Also described is a gene comprising a cDNA sequence encoding maize  
 CC Delta-9 desaturase. (I) can be used to modulate expression of a gene,  
 CC preferably Delta-9 desaturase or a granule bound starch synthase (GBSS)  
 CC gene, in a plant (preferably a maize or canola plant). (I) can be used to  
 CC modulate caffeine synthesis in a coffee plant, nicotine production in a  
 CC tobacco plant, fruit ripening processes in an apple, tomato, pear, plum  
 CC or peach plant, flower pigmentation in a rose, petunia, chrysanthemum or  
 CC marigold plant or lignin production in a tobacco, aspen, poplar or pine  
 CC plant  
 XX  
 SQ Sequence 17 BP; 1 A; 5 C; 6 G; 0 T; 5 U; 0 Other;  
 Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 62.5%; Pred. No. 4e+02;  
 Matches 10; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

QY 107 GCTGACTTTCAGCGGG 122  
 Db 1 GCUGCCUUCACGUGG 16  
 ||:|:::|||||

RESULT 421  
 AAV20570  
 ID AAV20570 standard; DNA; 17 BP.  
 XX

AC AAV20570;  
 XX  
 DT 02-JUL-1998 (first entry)  
 XX  
 DE Human BRCA1 probe #4.  
 XX  
 KW Breast cancer; ovarian cancer; mutation; classification; detection;  
 XX tumour; diagnostic; prognostic; probe; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN WO9805677-A1.  
 XX  
 PD 12-FEB-1998.  
 XX  
 PF 04-AUG-1997; 97WO-US013654.  
 XX  
 PR 05-AUG-1996; 96US-0023184P.  
 PR 05-AUG-1996; 96US-0023187P.  
 PR 05-AUG-1996; 96US-0023223P.  
 PR 06-AUG-1996; 96US-0022421P.  
 XX  
 PA (ONCO-) ONCORMED INC.  
 XX  
 PI Murphy PD, Allen AC, White MB, Olson SJ, Zeng B;  
 XX  
 DR WPI; 1998-159166/14.  
 XX  
 PT Detection of mutation(s) in the BRCA1 gene - by hybridisation with an  
 PT allele-specific oligo:nucleotide or by amplification, useful particularly  
 PT for breast or ovarian cancers.  
 XX  
 PS Example 4; Page 40; 62pp; English.  
 XX  
 CC AAV20567-V20574 are probes used in a method to detect mutations in the  
 CC human BRCA1 gene. Such mutations are used for classifying a tumour for  
 CC diagnostic and prognostic purposes or detecting a predisposition of  
 CC higher susceptibility to breast and ovarian cancer in an individual. The  
 CC methods can be used for reducing the high incidence and mortality  
 CC associated with breast and ovarian cancer through the early detection of  
 CC women at high risk. These women, once identified, can be targeted for  
 CC more aggressive prevention programmes  
 XX  
 SQ Sequence 17 BP; 8 A; 1 C; 7 G; 1 T; 0 U; 0 Other;  
 Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4e+02; Mismatches 0; Gaps 0;  
 Matches 14; Conservative 0; Indels 2; Indels 0; Gaps 0;  
 OY 366 GCAGGAGAGGACGG 381  
 DB |||||  
 2 GAAGAGAGGACGG 17  
 RESULT 422  
 AAX04779  
 ID AAX04779 standard; DNA; 17 BP.  
 XX  
 AC AAX04779;  
 XX  
 DT 14-APR-1999 (first entry)  
 XX  
 DE Group-specific amplification primer for HLA-DRB02.  
 XX  
 KW Human Leukocyte Antigen; HLA; HLA-DRB consensus sequence; intron 1;  
 KW HLA class II group type; histocompatibility analysis;  
 XX compatibility analysis; PCR primer; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN EP887423-A1.

XX 30-DEC-1998.  
 PD  
 XX 26-JUN-1997; 97EP-00110438.  
 PF  
 XX 26-JUN-1997; 97EP-00110438.  
 PR  
 XX (BIOT-) BIOTEST AG.  
 PA  
 XX Blasczyk R;  
 PI  
 XX WPI; 1999-047888/05.  
 DR  
 XX  
 PT Determining the Human Leukocyte Antigen Class II type Histocompatibility  
 PT antigens - by using new intron-specific oligonucleotide primers for  
 PT sequence specific primer PCR and sequencing.  
 XX  
 PS Claim 13; Fig 3A; 36pp; English.  
 XX  
 CC AAX04778-93 represent group-specific amplification primers for Human  
 CC Leukocyte Antigen (HLA)-DRB sequences. The primers are used in the  
 CC methods of the invention. The specification describes a method for  
 CC determining the HLA class II group type of a subject. The method  
 CC comprises amplifying a target DNA sample from a subject using a  
 CC particular HLA group-specific primer pair and determining whether a  
 CC nucleic acid product is produced, therefore identifying the group type.  
 CC Methods for determining the HLA class allele type of a subject are also  
 CC described, where a specific HLA group-specific exon region primer pair is  
 CC used. The methods are useful for determining the HLA Class II type of a  
 CC patient sample, by identifying the specific alleles present and  
 CC determining the group specificity of alleles. The methods are  
 CC diagnostically useful for histocompatibility analysis to see if donor and  
 CC recipient groups match, and for further compatibility analysis  
 XX  
 SQ Sequence 17 BP; 2 A; 10 C; 4 G; 1 T; 0 U; 0 Other;  
 Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4e+02; Mismatches 0; Gaps 0;  
 Matches 14; Conservative 0; Indels 2; Indels 0; Gaps 0;  
 OY 232 AGCCCCGGAACCCGCG 247  
 DB |||||  
 1 AGCCCCGGAACCCGCG 16  
 RESULT 423  
 AAX00304  
 ID AAX00304 standard; DNA; 17 BP.  
 XX  
 AC AAX00304;  
 XX  
 DT 23-APR-1999 (first entry)  
 XX  
 DE Human leukocyte antigen class II type PCR primer DRB02.  
 XX  
 KW Human leukocyte antigen class II type; HLA class II type;  
 KW histocompatibility locus antigen class II; PCR primer; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN EP892069-A2.  
 XX  
 DT 20-JAN-1999.  
 XX  
 DE 25-JUN-1998; 98EP-00111696.  
 PF  
 XX 26-JUN-1997; 97EP-00110438.  
 PR  
 XX (BIOT-) BIOTEST AG.  
 PA  
 XX Blasczyk R;  
 PI  
 XX

DR WPI; 1999-083585/08.

XX Determining the Human Leukocyte Antigen Class II type Histocompatibility

PT antigens - by using new intron-specific oligonucleotide primers for

PT sequence specific primer PCR and sequencing.

XX Claim 4; Fig 3; 36pp; English.

XX A method has been developed of determining the Human Leukocyte Antigen

CC class II (HLA Class II) group type of a subject. The method comprises:

CC (i) amplifying a target DNA sample from a subject using a particular HLA

CC group-specific primer pair (sequence specific primer PCR - SSP-PCR); and

CC (ii) determining whether a nucleic acid product is produced, therefore

CC identifying the group type. AAX00303 to AAX00396 represent specifically

CC claimed oligonucleotide primer for use in the above method. These

CC oligonucleotides are useful for determining the HLA Class II type of a

CC patient sample, by identifying the specific alleles present and

CC determining the group specificity of alleles. Steps (i) and (ii) in the

CC method are diagnostically useful for histocompatibility analysis to see

CC if donor and recipient groups match. The new sequences are useful for

CC providing an insight into the genetic relationship between different

CC alleles of HLA Class II genes. The high resolution, nucleic acid based

CC method using the intron-specific primers is more efficient than prior art

CC methods using exon based primers, as few exon sequences offer conserved

CC primer binding sites, resulting in a limited number of primer pairs and

CC insufficient specificity for alleles, as allelic variations exist between

CC the primer sites. The SSP-PCR method allows separation of haplotypes in

CC 95% of patient samples, allowing resolution of cis-trans linkages of

CC heterozygous sequencing results which cannot be achieved with other

CC protocols

XX Sequence 17 BP; 2 A; 10 C; 4 G; 1 T; 0 U; 0 Other;

SQ Query Match 2.8%; Score 12.8; DB 1; Length 17;

Best Local Similarity 87.5%; Pred. No. 4e+02; Indels 0; Gaps 0;

Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 232 AGCCCCCGAACCCCGC 247

Db 1 AGCGCCGCGACCCCGC 16

RESULT 424

AAX55127/c

ID AAX55127 standard; DNA; 17 BP.

AC AAX55127;

XX 05-JUL-1999 (first entry)

DT C/EBP-beta antisense oligonucleotide fragment.

DE Antisense oligonucleotide; multiple target; antisense treatment;

XX impaired respiration; inflammation; lung disease;

KW pulmonary vasoconstriction; inflammation; allergic rhinitis;

KW acute asthma; allergy; asthma; impeded respiration;

KW respiratory distress syndrome; pain; cystic fibrosis;

KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;

KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;

KW colon cancer; breast cancer; lung cancer; pancreatic cancer;

KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;

KW prostate cancer; ss.

XX Synthetic.

OS WO9913886-A1.

XX 25-MAR-1999.

PD 17-SEP-1998; 98WO-US019419.

XX 17-SEP-1997; 97US-0059160P.

PR 09-JUN-1998; 98US-00093972.

XX (UYEC-) UNIV EAST CAROLINA.

XX Myce JW;

XX WPI; 1999-229400/19.

XX New antisense oligonucleotides used in treatment of, e.g. pulmonary

PT vasoconstriction.

XX Disclosure; Page 71; 120pp; English.

XX The specification describes antisense oligonucleotides (AAX52869-X55271)

CC directed against at least 2 mRNAs selected from target genes, coding and

CC non-coding regions of RNAs corresponding to target genes, gene initiation

CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'

CC -end and the juxta-section between coding and non-coding regions and all

CC segments of RNAs encoding proteins associated with one or more diseases,

CC conditions or mixtures. The antisense oligonucleotides may be derived

CC from sequences AAX55272-74. These multiple target oligonucleotides

CC (specifically AAX55180-271) can be used for the antisense treatment of

CC diseases and conditions. Typical diseases and conditions are those

CC associated with impaired respiration and inflammation, including lung

CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,

CC acute asthma, allergies, asthma, impeded respiration, respiratory

CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,

CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary

CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.

CC colon cancer, breast cancer, lung cancer, pancreatic cancer,

CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as

CC well as all types of cancers which may metastasize or have metastasized

CC to the lungs, including breast and prostate cancer

XX Sequence 17 BP; 0 A; 12 C; 5 G; 0 T; 0 U; 0 Other;

SQ Query Match 2.8%; Score 12.8; DB 1; Length 17;

Best Local Similarity 87.5%; Pred. No. 4e+02; Indels 0; Gaps 0;

Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 257 GCGGTCGCGCCGCGGC 272

Db 16 GCGGCGCGCGCGGC 1

RESULT 425

AAA34574/c

ID AAA34574 standard; DNA; 17 BP.

AC AAA34574;

XX 28-JUL-2000 (first entry)

DT Human adenosine receptor related polynucleotide SEQ ID NO:2263.

DE Human; adenosine receptor; low adenosine antisense oligonucleotide;

KW phosphorothioate; impaired respiration; inflammation; allergy;

KW allergic disease; bronchoconstriction; inhibitor; anti-inflammatory;

KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;

KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;

KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;

KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;

KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.

XX Homo sapiens.

OS WO200009525-A2.

XX 24-FEB-2000.

PD 03-AUG-1999; 99WO-US017712.

XX 03-AUG-1998; 98US-0095212P.







XX Claim 4; Page 52; 115pp; English.  
 XX The present invention provides nucleic acid molecules capable of  
 CC downregulating the expression of the human checkpoint kinase-1 (Chk1)  
 CC gene. These may be antisense or ribozyme sequences, and are useful in the  
 CC treatment of diseases associated with conditions affected by Chk1 levels,  
 CC including cancer. The present sequence is an oligonucleotide described in  
 CC the exemplification of the invention  
 XX  
 SQ Sequence 17 BP; 5 A; 2 C; 7 G; 0 T; 3 U; 0 Other;

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. NO. 4e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 272 CTTCTCCGGAGGCACC 287  
 ||||| |||||  
 Db 17 CTTCTCCATAGGCACC 2

RESULT 430  
 AAH95534/C  
 ID AAH95534 standard; RNA; 17 BP.

XX AAH95534;

DT 09-OCT-2001 (first entry)

DE Human Chk1 ribozyme substrate SEQ ID NO: 959.

XX Human; checkpoint kinase-1; Chk1; antisense; ribozyme; gene therapy;  
 KW RNA cleavage; cancer; ss.

OS Homo sapiens.

PN WO200157206-A2.

XX 09-AUG-2001.

PF 02-FEB-2001; 2001WO-US003504.

XX 03-FEB-2000; 2000US-0179983P.

PA (RIBO-) RIBOZYME PHARM INC.

PA (FATT/) FATTAEY A R.

PI Fattaey AR, Jarvis T, Mcswiggen J, Booher RN, Holman PS;

DR WPI; 2001-496922/54.

XX Novel nucleic acid molecule e.g., ribozymes or antisense nucleic acid  
 PT molecules, which downregulate expression of a checkpoint kinase-1 gene,  
 PT useful for treating colorectal, lung, breast or prostate cancers.

XX Claim 4; Page 77; 115pp; English.

XX The present invention provides nucleic acid molecules capable of  
 CC downregulating the expression of the human checkpoint kinase-1 (Chk1)  
 CC gene. These may be antisense or ribozyme sequences, and are useful in the  
 CC treatment of diseases associated with conditions affected by Chk1 levels,  
 CC including cancer. The present sequence is an oligonucleotide described in  
 CC the exemplification of the invention  
 XX

SQ Sequence 17 BP; 5 A; 2 C; 7 G; 0 T; 3 U; 0 Other;

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. NO. 4e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 272 CTTCTCCGGAGGCACC 287  
 ||||| |||||  
 Db 17 CTTCTCCATAGGCACC 2

RESULT 431  
 ABK00059/C  
 ID ABK00059 standard; RNA; 17 BP.

XX ABK00059;

DT 12-MAR-2002 (first entry)

XX Human NOGO Hammerhead Ribozyme #59.

XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;  
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;  
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;  
 KW DNazyme; inozyme; G-cleaver; amberyzyme; zinzyme; lymphoma; leukaemia;  
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;  
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;  
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;  
 KW inflammatory arthropathy; central nervous system injury;  
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;  
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;  
 KW Parkinson's disease; ataxia; Huntington's disease;  
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

XX Homo sapiens.

OS Synthetic.

PN WO200159103-A2.

XX 16-AUG-2001.

XX 09-FEB-2001; 2001WO-US004273.

PF 11-FEB-2000; 2000US-0181797P.

PR 28-FEB-2000; 2000US-0185516P.

PR 06-MAR-2000; 2000US-0187128P.

XX (RIBO-) RIBOZYME PHARM INC.

PA (BLAT/) BLATT L.

PA (MCSW/) MCSWIGGEN J.

PA (CHOW/) CHOWRIRA B M.

XX Blatt L, Mcswiggen J, Chowrira BM;

PI WPI; 2001-607195/69.

XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense  
 PT constructs, which down regulate expression of a CD20 gene or neurite  
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and  
 PT central nervous system injury.

XX Claim 88; Page 66; 200pp; English.

XX The invention relates to a nucleic acid molecule which down regulates  
 CC expression of a CD20 gene and a nucleic acid molecule which down  
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The  
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a  
 CC DNazyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule  
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or  
 CC an amberyzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA  
 CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA  
 CC of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>.  
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of  
 CC the cell and treat a patient having a condition associated with the level  
 CC of CD20. The treatment may further comprise the use of one or more  
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to  
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-  
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic  
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell  
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,  
 CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-  
 CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the



XX PD 16-AUG-2001.  
XX PF 09-FEB-2001; 2001WO-US004273.  
XX PR 11-FEB-2000; 2000US-0181797P.  
XX PR 28-FEB-2000; 2000US-0185516P.  
XX PR 06-MAR-2000; 2000US-0187128P.  
XX PA (RIBO-) RIBOZYME PHARM INC.  
XX PA (BLAT/) BLATT L.  
XX PA (MCSW/) MCSWIGGEN J.  
XX PA (CHOW/) CHOWRIRA B M.  
XX PI Blatt L, Mcswiggen J, Chowrira BM;  
XX DR WPI; 2001-607195/69.  
XX PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.  
XX PS Claim 88; Page 98; 200pp; English.  
XX CC The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NOGO). The nucleic acids may be enzymatic nucleic acids (e.g., a ribozyme or a DNazyme) an Inozyme (an endolytic nucleic acid cleaving an RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or an amberyzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more of CD20. The treatment may further comprise the use of one or more therapies. In particular, the CD20 targeting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-targeting nucleic acid is used to cleave RNA of the NOGO gene in the presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the nucleic acid may be contacted with a cell to reduce NOGO activity of the cell and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more therapies. In particular, the NOGO-targeting nucleic acid may be used to treat central nervous system (CNS) injury and cerebrovascular accident (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob disease, muscular dystrophy, and/or other neurodegenerative disease states which respond to the modulation of NOGO expression. The present sequence is a zinzyme molecule of the invention  
SQ Sequence 17 BP; 0 A; 7 C; 8 G; 0 T; 2 U; 0 Other;  
Query March 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. NO. 4e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Oy 254 GCCGCGTCCGCCGG 269  
Db 17 GCCGCGACAGCCCG 2  
RESULT 434  
ABK00058/c  
ID ABK00058 standard; RNA; 17 BP.  
XX  
AC ABK00058;  
XX DT 12-MAR-2002 (first entry)  
XX DE Human NOGO Hammerhead Ribozyme #58.  
XX KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; nootropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNazyme; inozyme; G-cleaver; amberyzyme; zinzyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia; human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury;  
KW cerebrotrophic accident; CVA; Alzheimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; Parkinson's disease; ataxia; Huntington's disease;  
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.  
XX Homo sapiens.  
OS Synthetic.  
OS WO200159103-A2.  
XX PN 16-AUG-2001.  
XX PD 09-FEB-2001; 2001WO-US004273.  
XX PF 11-FEB-2000; 2000US-0181797P.  
XX PR 28-FEB-2000; 2000US-0185516P.  
XX PR 06-MAR-2000; 2000US-0187128P.  
XX PA (RIBO-) RIBOZYME PHARM INC.  
XX PA (BLAT/) BLATT L.  
XX PA (MCSW/) MCSWIGGEN J.  
XX PA (CHOW/) CHOWRIRA B M.  
XX PI Blatt L, Mcswiggen J, Chowrira BM;  
XX DR WPI; 2001-607195/69.  
XX PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.  
XX PS Claim 88; Page 66; 200pp; English.  
XX CC The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NOGO). The nucleic acids may be enzymatic nucleic acids (e.g., a ribozyme or a DNazyme) an Inozyme (an endolytic nucleic acid cleaving an RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or an amberyzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more therapies. In particular, the CD20 targeting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-targeting nucleic acid is used to cleave RNA of the NOGO gene in the presence of a divalent cation that is preferably Mg<sup>2+</sup>. Furthermore, the nucleic acid may be contacted with a cell to reduce NOGO activity of the cell and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more therapies. In particular, the NOGO-targeting nucleic acid may be used to treat central nervous system (CNS) injury and cerebrovascular accident (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),

```
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC disease, muscular dystrophy, and/or other neurodegenerative disease
CC states which respond to the modulation of NOGO expression. The present
CC sequence is a hammerhead ribozyme of the invention
XX
SQ Sequence 17 BP; 0 A; 6 C; 3 G; 0 T; 8 U; 0 Other;

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 363 GCCGACGAGGAAGAGAA 378
DB 17 GCAGCAGGAAGAGCAA 2

RESULT 435
ABL46698/c
ID ABL46698 standard; RNA; 17 BP.
XX
AC ABL46698;
XX
XX 27-JUN-2003 (first entry)
XX
DE Human GRID NCH ribozyme substrate oligonucleotide #152.
XX
XX Human; Grb2-related with Insert Domain; GRID; T-cell;
KW co-stimulatory adaptor protein; tissue rejection; graft rejection;
KW leukaemia; cytostatic; ss.
XX
OS Homo sapiens.
XX
XX WO200162911-A2.
XX
XX 30-AUG-2001.
XX
XX 23-FEB-2001; 2001WO-US005957.
XX
XX 24-FEB-2000; 2000US-0184594P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX (GLAX ) GLAXO GROUP LTD.
XX
XX Jarvis T, Von Carlowitz I, Mcswiggen JA, Hamblin PA, Ellis JH;
XX WPI; 2001-550088/61.
XX
XX New nucleic acid(s) for regulating the Grb2-related with Insert Domain
XX (GRID) gene comprises using antisense and enzymatic nucleic acid
XX molecules such as hammerhead ribozymes.
XX
XX Claim 4; Page 65; 108pp; English.
XX
XX The present invention relates to oligonucleotides that downregulate the
XX expression of human Grb2-related with Insert Domain (GRID) gene. GRID is
XX a T-cell co-stimulatory adaptor protein. The oligonucleotides are useful
XX for modulating the expression of GRID, to treat conditions such as
XX tissue/graft rejection and leukaemia. The oligonucleotides can also be
XX administered in conjunction with other therapies such as radiation,
XX chemotherapy and cyclosporin treatment. The present oligonucleotide was
XX used to illustrate the invention
XX
SQ Sequence 17 BP; 3 A; 4 C; 9 G; 0 T; 1 U; 0 Other;

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 200 CCTCCCGGGGACCTGC 215
DB 16 CCTCCCTGGGACCTCC 1

chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
disease, muscular dystrophy, and/or other neurodegenerative disease
states which respond to the modulation of NOGO expression. The present
sequence is a hammerhead ribozyme of the invention

Sequence 17 BP; 0 A; 6 C; 3 G; 0 T; 8 U; 0 Other;

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 363 GCCGACGAGGAAGAGAA 378
DB 17 GCAGCAGGAAGAGCAA 2

RESULT 435
ABL46698/c
ID ABL46698 standard; RNA; 17 BP.
XX
AC ABL46698;
XX
XX 27-JUN-2003 (first entry)
XX
DE Human GRID NCH ribozyme substrate oligonucleotide #152.
XX
XX Human; Grb2-related with Insert Domain; GRID; T-cell;
KW co-stimulatory adaptor protein; tissue rejection; graft rejection;
KW leukaemia; cytostatic; ss.
XX
OS Homo sapiens.
XX
XX WO200162911-A2.
XX
XX 30-AUG-2001.
XX
XX 23-FEB-2001; 2001WO-US005957.
XX
XX 24-FEB-2000; 2000US-0184594P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX (GLAX ) GLAXO GROUP LTD.
XX
XX Jarvis T, Von Carlowitz I, Mcswiggen JA, Hamblin PA, Ellis JH;
XX WPI; 2001-550088/61.
XX
XX New nucleic acid(s) for regulating the Grb2-related with Insert Domain
XX (GRID) gene comprises using antisense and enzymatic nucleic acid
XX molecules such as hammerhead ribozymes.
XX
XX Claim 4; Page 65; 108pp; English.
XX
XX The present invention relates to oligonucleotides that downregulate the
XX expression of human Grb2-related with Insert Domain (GRID) gene. GRID is
XX a T-cell co-stimulatory adaptor protein. The oligonucleotides are useful
XX for modulating the expression of GRID, to treat conditions such as
XX tissue/graft rejection and leukaemia. The oligonucleotides can also be
XX administered in conjunction with other therapies such as radiation,
XX chemotherapy and cyclosporin treatment. The present oligonucleotide was
XX used to illustrate the invention
XX
SQ Sequence 17 BP; 3 A; 4 C; 9 G; 0 T; 1 U; 0 Other;

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 200 CCTCCCGGGGACCTGC 215
DB 16 CCTCCCTGGGACCTCC 1
```

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RESULT 436
ABV85745/c
ID ABV85745 standard; DNA; 17 BP.
XX
AC ABV85745;
XX
XX 11-DEC-2002 (first entry)
XX
XX Human pp-GaNTase 10 scanning 17-mer SEQ ID NO:738.
XX
XX Human; UDP-GalNAC:polypeptide N-acetylglactosaminyltransferase 10;
XX pp-GaNTase 10; EC 2.4.1.41; chromosome 7q11.2; gene therapy; scanning;
XX ss.
XX
XX Homo sapiens.
XX
XX Synthetic.
XX
XX EP1243660-A2.
XX
XX 25-SEP-2002.
XX
XX 25-JAN-2002; 2002EP-00001161.
XX
XX 30-JAN-2001; 2001WO-US000663.
XX
XX 30-JAN-2001; 2001WO-US000664.
XX
XX 30-JAN-2001; 2001WO-US000665.
XX
XX 30-JAN-2001; 2001WO-US000666.
XX
XX 30-JAN-2001; 2001WO-US000667.
XX
XX 30-JAN-2001; 2001WO-US000668.
XX
XX 30-JAN-2001; 2001WO-US000669.
XX
XX 30-JAN-2001; 2001WO-US000670.
XX
XX 23-MAY-2001; 2001US-00864761.
XX
XX 30-AUG-2001; 2001US-0315984P.
XX
XX (AEOM-) AEOMICA INC.
XX
XX Zhang J, Gu Y, Nguyen C;
XX WPI; 2002-724954/79.
XX
XX Nucleic acid encoding human UDP-GalNAC:polypeptide N-
XX cetylglactosaminyltransferase 10 protein is useful to diagnose, prevent
XX and treat disorders associated with reduced or over expression of the
XX encoded protein.
XX
XX Example 2; SEQ ID NO 738; 59pp; English.
XX
XX The present invention describes an isolated nucleic acid (I) encoding a
XX human UDP-GalNAC:polypeptide N-acetylglactosaminyltransferase 10 (pp-
XX GaNTase 10, EC 2.4.1.41) protein. Human pp-GaNTase 10 is located to
XX chromosome 7q11.2. (I) can be used in gene therapy. Molecules of the
XX present invention can be used in therapy, particularly to prevent or
XX treat a disorder associated with decreased expression or activity of pp-
XX GaNTase. The sequences given in ABV85011 to ABV86689 and ABP53502 to
XX ABP53504 are given in the exemplification of the present invention. N.B.
XX The sequence data for this patent is not represented in the printed
XX specification but is based on sequence information supplied by the
XX European Patent Office
XX
XX Sequence 17 BP; 3 A; 6 C; 6 G; 2 T; 0 U; 0 Other;

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 343 GCGAGGTTCCAGGCCTT 358
DB 17 GCGCGATCAGGCCTT 2

RESULT 437
ABV85746/c
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ID ABV85746 standard; DNA; 17 BP.  
XX  
AC ABV85746;  
XX  
DT 11-DEC-2002 (first entry)  
XX  
DE Human pp-GaNTase 10 scanning 17-mer SEQ ID NO:739.  
XX  
DE Human; UDP-GalNac:polypeptide N-acetylgalactosaminyltransferase 10;  
XX KW pp-GaNTase 10; EC 2.4.1.41; chromosome 7q11.2; gene therapy; scanning;  
KW ss.  
XX KW Homo sapiens.  
OS  
OS Synthetic.  
XX  
PN EP1243660-A2.  
XX  
XX 25-SEP-2002.  
PD  
XX 25-JAN-2002; 2002EP-00001161.  
XX  
XX 30-JAN-2001; 2001WO-US000663.  
PR 30-JAN-2001; 2001WO-US000664.  
PR 30-JAN-2001; 2001WO-US000665.  
PR 30-JAN-2001; 2001WO-US000666.  
PR 30-JAN-2001; 2001WO-US000667.  
PR 30-JAN-2001; 2001WO-US000668.  
PR 30-JAN-2001; 2001WO-US000669.  
PR 30-JAN-2001; 2001WO-US000670.  
PR 23-MAY-2001; 2001US-00864761.  
PR 30-AUG-2001; 2001US-0315984P.  
XX  
PA (ABOM-) ABOMICA INC.  
XX  
XX Zhang J, Gu Y, Nguyen C;  
PI  
XX WPI; 2002-724954/79.  
DR  
XX Nucleic acid encoding human UDP-GalNac:polypeptide N-  
XX cetylglactosaminyltransferase 10 protein is useful to diagnose, prevent  
PT and treat disorders associated with reduced or over expression of the  
PT encoded protein.  
PT  
XX  
PS Example 2; SEQ ID NO 739; 59pp; English.  
XX  
XX The present invention describes an isolated nucleic acid (I) encoding a  
CC human UDP-GalNac:polypeptide N-acetylgalactosaminyltransferase 10 (pp-  
CC GaNTase 10, EC 2.4.1.41) protein. Human pp-GaNTase 10 is located to  
CC chromosome 7q11.2. (I) can be used in gene therapy. Molecules of the  
CC present invention can be used in therapy, particularly to prevent or  
CC treat a disorder associated with decreased expression or activity of pp-  
CC GaNTase. The sequences given in ABV85011 to ABV86689 and ABP53502 to  
CC ABP53504 are given in the exemplification of the present invention. N.B.  
CC The sequence data for this patent is not represented in the printed  
CC specification but is based on sequence information supplied by the  
CC European Patent Office  
XX  
SQ Sequence 17 BP; 3 A; 6 C; 5 G; 3 T; 0 U; 0 Other;  
Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02; Mismatches 0; Gaps 0;  
Matches 14; Conservative 0; Indels 2; Indels 0; Gaps 0;  
OY 343 GCGAGGATTCAGGCCTT 358  
DB 16 GCGCGGATCAGGCCTT 1  
RESULT 438  
ABK25391  
ID ABK25391 standard; DNA; 17 BP.  
XX  
AC ABK25391;  
XX

XX 09-APR-2002 (first entry)  
XX Male-sterile plant producing genome altering oligonucleotide #291.  
XX  
XX Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss;  
KW o-methyl modification; LNA modification; phosphorothioate linkage;  
KW DNA repair; DNA alteration; environmental tolerance; hygromycin-B;  
KW abiotic stress tolerance; improved nutritional value; hygromycin; primer;  
KW amino acid over production; herbicide resistance; glyphosate resistance;  
KW imidazolinone herbicide resistance; sulphonylurea herbicide resistance;  
KW porphyrin herbicide resistance; triazine resistance; disease resistance;  
KW modified oil production; modified starch production; waxy starch;  
KW altered floral morphology; male-sterile plant; albino mutant;  
KW modified fatty acid content; reduced palmitate production; albino plant;  
KW increased stearate production; reduced linolenic acid production;  
KW photosynthetic process.  
XX  
XX Zea mays.  
OS  
OS Synthetic.  
XX  
XX WO200192512-A2.  
XX  
XX 06-DEC-2001.  
PD  
XX 01-JUN-2001; 2001WO-US017672.  
XX  
XX 01-JUN-2000; 2000US-0208538P.  
PR 30-OCT-2000; 2000US-0244989P.  
PR 27-MAR-2001; 2001US-00818875.  
XX  
XX (UYDE ) UNIV DELAWARE.  
PA  
XX Kmiec EB, Gamper HB, Rice MC, Kim J;  
PI  
XX WPI; 2002-106307/14.  
DR  
XX New oligonucleotides with modified nuclease-resistant termini, useful for  
PT creating plants with desired phenotypes, e.g. stress tolerance, improved  
PT nutritional value, herbicide or disease resistance, or modified oil  
PT production.  
XX  
XX Claim 7; Page 87; 220pp; English.  
XX  
XX The invention relates to an oligonucleotide for targeted alteration of a  
CC genetic sequence, which comprises a single-stranded oligonucleotide  
CC having a DNA domain. The DNA domain has at least one mismatch with  
CC respect to the genetic sequence to be altered and further comprises  
CC chemical modifications of the oligonucleotide. The chemical modifications  
CC consist of o-methyl modification, an LNA modification, two or more  
CC phosphorothioate linkages on a terminus, or a combination of any two or  
CC more of these modifications. The oligonucleotides are useful for  
CC directing repair or alteration of plant genetic information. The  
CC oligonucleotides are particularly useful for creating plants with desired  
CC phenotypes, e.g. environmental or abiotic stress tolerance, improved  
CC nutritional value (e.g. altering amino acid content of plants or  
CC conferring amino acid over production), herbicide resistance (e.g.  
CC glyphosate resistance, imidazolinone and sulphonylurea herbicide  
CC resistance, porphyrin herbicide resistance or triazine resistance),  
CC disease resistance, modified oil production, modified starch production  
CC (e.g. increased starch or production of waxy starch), altered floral  
CC morphology (e.g. male-sterile plants) or modified fatty acid content  
CC (e.g. reduced palmitate, increased stearate or reduced linolenic acid).  
CC The oligonucleotides are also useful for producing albino mutants for the  
CC analysis of photosynthetic processes. This sequence represents a genome  
CC altering oligonucleotide of the invention  
XX  
SQ Sequence 17 BP; 2 A; 5 C; 7 G; 3 T; 0 U; 0 Other;  
Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02; Mismatches 0; Gaps 0;  
Matches 14; Conservative 0; Indels 2; Indels 0; Gaps 0;

Qy 410 CTGAGCTGTGGGACGT 425  
 Db 1 CTGAGCTGAGGCCGT 16

RESULT 439  
 ID ABK25392/c  
 XX ABK25392 standard; DNA; 17 BP.  
 AC ABK25392;  
 XX  
 DT 09-APR-2002 (first entry)  
 XX  
 DE Male-sterile plant producing genome altering oligonucleotide #292.  
 XX

Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss;  
 o-methyl modification; DNA modification; phosphorothioate linkage;  
 DNA repair; DNA alteration; environmental tolerance; hygromycin-B;  
 abiotic stress tolerance; improved nutritional value; hygromycin-B;  
 amino acid over production; herbicide resistance; glyphosate resistance;  
 imidazolinone herbicide resistance; triazine resistance; disease resistance;  
 porphyrin herbicide resistance; sulphonylurea herbicide resistance;  
 modified oil production; modified starch production; waxy starch;  
 altered floral morphology; male-sterile plant; albino mutant;  
 modified fatty acid content; reduced palmitate production; albino plant;  
 increased stearate production; reduced linolenic acid production;  
 photosynthetic process.

XX Zea mays.  
 OS Synthetic.  
 XX  
 PN WO200192512-A2.  
 XX  
 PD 06-DEC-2001.  
 XX  
 PF 01-JUN-2001; 2001WO-US017672.  
 XX  
 PR 01-JUN-2000; 2000US-0208538P.  
 PR 30-OCT-2000; 2000US-0244989P.  
 PR 27-MAR-2001; 2001US-00818875.  
 XX  
 PA (UYDE ) UNIV DELAWARE.  
 XX  
 PI Kmtc EB, Gamper HB, Rice MC, Kim J;  
 XX  
 DR WPI; 2002-106307/14.  
 XX

New oligonucleotides with modified nuclease-resistant termini, useful for  
 creating plants with desired phenotypes, e.g. stress tolerance, improved  
 nutritional value, herbicide or disease resistance, or modified oil  
 production.

Claim 7; Page 87; 220pp; English.

XX The invention relates to an oligonucleotide for targeted alteration of a  
 genetic sequence, which comprises a single-stranded oligonucleotide  
 having a DNA domain. The DNA domain has at least one mismatch with  
 respect to the genetic sequence to be altered and further comprises  
 chemical modifications of the oligonucleotide. The chemical modifications  
 consist of o-methyl modification, an DNA modification, two or more  
 phosphorothioate linkages on a terminus, or a combination of any two or  
 more of these modifications. The oligonucleotides are useful for  
 directing repair or alteration of plant genetic information. The  
 oligonucleotides are particularly useful for creating plants with desired  
 phenotypes, e.g. environmental or abiotic stress tolerance, improved  
 nutritional value (e.g. altering amino acid content of plants or  
 conferring amino acid over production), herbicide resistance (e.g.  
 glyphosate resistance, imidazolinone and sulphonylurea herbicide  
 resistance), porphyrin herbicide resistance or triazine resistance),  
 disease resistance, modified oil production, modified starch production  
 (e.g. increased starch or production of waxy starch), altered floral  
 morphology (e.g. male-sterile plants) or modified fatty acid content  
 (e.g. reduced palmitate, increased stearate or reduced linolenic acid).

CC The oligonucleotides are also useful for producing albino mutants for the  
 analysis of photosynthetic processes. This sequence represents a genome  
 altering oligonucleotide of the invention  
 XX  
 SQ Sequence 17 BP; 3 A; 7 C; 5 G; 2 T; 0 U; 0 Other;  
 Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 XX

Qy 410 CTGAGCTGTGGGACGT 425  
 Db 17 CTGAGCTGAGGCCGT 2

RESULT 440  
 ID ABK18192/c  
 XX ABK18192 standard; RNA; 17 BP.  
 AC ABK18192;  
 XX  
 DT 09-APR-2002 (first entry)  
 XX  
 DE Human ERG hammerhead ribozyme target sequence, Seq ID No 839.  
 XX  
 KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;  
 ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;  
 vulnary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;  
 tumour angiogenesis; diabetic retinopathy; macular degeneration;  
 neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;  
 angiofibroma of tuberosus sclerosis; port-wine stain; wound healing;  
 Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;  
 Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;  
 amberzyme.  
 KW  
 XX Homo sapiens.  
 OS  
 PN WO200188124-A2.  
 XX  
 PD 22-NOV-2001.  
 XX  
 PF 16-MAY-2001; 2001WO-US015866.  
 XX  
 PR 16-MAY-2000; 2000US-00572021.  
 XX  
 PA (RIBO-) RIBOZYME PHARM INC.  
 PA (GLAX ) GLAXO GROUP LTD.  
 PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;  
 XX  
 DR WPI; 2002-082995/11.  
 XX

Novel polynucleotide which down regulates expression of Ets-related gene,  
 useful for treating cancer, diabetic retinopathy, macular degeneration,  
 arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.

Claim 4; Page 74; 149pp; English.

XX The invention relates to a nucleic acid molecule (I) which down regulates  
 expression of an Ets-related gene (ERG). (I) is useful for treating  
 conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,  
 tumour angiogenesis, diabetic retinopathy, macular degeneration,  
 neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca  
 vulgaris, angiofibroma of tuberosus sclerosis, port-wine stains, Sturge  
 Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu  
 syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for  
 treating a patient having a condition associated with the level of ERG,  
 by contacting cells of the patient with (I) under conditions suitable for  
 the treatment. The method comprises the use of one or more therapeutics  
 under conditions suitable for the treatment. Leukaemia or tumour  
 angiogenesis is treated by administering (I) to the patient in  
 conjunction with one or more of other therapies such as radiation or  
 chemotherapy treatment. (I) is useful for reducing ERG activity in a



XX The invention relates to an isolated SH3 domain (POSH)-like signalling  
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino  
CC acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),  
CC (S1) having 95% deviations, especially conservative substitutions or a  
CC fragment of the sequences comprising at least 8 contiguous amino acids.  
CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an  
CC adaptor protein that interacts with Rho family small GTPases as well as  
CC downstream components of the signal transduction pathway. (I) is useful  
CC for identifying a specific binding partner. (I) and nucleic acids (II)  
CC encoding (I) are useful for diagnosing, monitoring disease and treating  
CC caused by altered expression of human POSHL1 including diagnosing and  
CC treating cancer, they are useful in the development of vaccines and (II) is  
CC useful in gene therapy. (II) is useful for constructing microarrays which  
CC are useful for measuring and for surveying gene expression and creating  
CC transgenic non-human animals capable of producing the proteins. The  
CC present sequence is that of a scanning oligonucleotide useful in examples  
CC of the invention. Note: The present sequence did not form part of the  
CC printed specification, but is based on sequence information supplied to  
CC Derwent by the European Patent Office  
XX  
SQ Sequence 17 BP; 3 A; 6 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 272 CTTCTCCGGAGGACC 287  
Db 1 CTTCTCCGGAGACAGC 16

RESULT 443  
ABV90002  
ID ABV90002 standard; DNA; 17 BP.

AC ABV90002;

XX 23-DEC-2002 (first entry)

XX Human POSHL1 scanning oligonucleotide SEQ ID NO 715.

XX Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;  
KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;  
KW gene therapy; transgenic; ss.

XX Homo sapiens.

XX EP1239051-A2.

XX 11-SEP-2002.

XX 28-JAN-2002; 2002EP-00001165.

XX 30-JAN-2001; 2001WO-US0000663.

XX 30-JAN-2001; 2001WO-US0000664.

XX 30-JAN-2001; 2001WO-US0000665.

XX 30-JAN-2001; 2001WO-US0000666.

XX 30-JAN-2001; 2001WO-US0000667.

XX 30-JAN-2001; 2001WO-US0000668.

XX 30-JAN-2001; 2001WO-US0000669.

XX 23-MAY-2001; 2001WO-US0000670.

XX 10-OCT-2001; 2001US-0328205P.

XX (AEOM-) AEOMICA INC.

XX Shannon M;

XX WPI; 2002-684061/74.

XX Novel human SH3 domain (POSH)-like signalling protein 1 polypeptide, POSHL  
PT -1, useful for treating disorders associated with decreased expression or

PT activity of human POSHL1.

XX Example 2; SEQ ID NO 715; 60pp + Sequence Listing; English.

XX The invention relates to an isolated SH3 domain (POSH)-like signalling  
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino  
CC acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),  
CC (S1) having 95% deviations, especially conservative substitutions or a  
CC fragment of the sequences comprising at least 8 contiguous amino acids.  
CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an  
CC adaptor protein that interacts with Rho family small GTPases as well as  
CC downstream components of the signal transduction pathway. (I) is useful  
CC for identifying a specific binding partner. (I) and nucleic acids (II)  
CC encoding (I) are useful for diagnosing, monitoring disease and treating  
CC caused by altered expression of human POSHL1 including diagnosing and  
CC treating cancer, they are useful in the development of vaccines and (II) is  
CC useful in gene therapy. (II) is useful for constructing microarrays which  
CC are useful for measuring and for surveying gene expression and creating  
CC transgenic non-human animals capable of producing the proteins. The  
CC present sequence is that of a scanning oligonucleotide useful in examples  
CC of the invention. Note: The present sequence did not form part of the  
CC printed specification, but is based on sequence information supplied to  
CC Derwent by the European Patent Office  
XX

SQ Sequence 17 BP; 3 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 272 CTTCTCCGGAGGACC 287  
Db 2 CTTCTCCGGAGACAGC 17

RESULT 444  
ABL31582/C

XX ABL31582 standard; DNA; 17 BP.

AC ABL31582;

XX 21-MAR-2002 (first entry)

XX Human HLA genotyping oligonucleotide SEQ ID NO 1071.

XX Human; human leukocyte antigen; HLA; genotype; polymorphism;  
KW immunogenetic; transplantation; genetic disease; ss.

XX Homo sapiens.

XX WO200192572-A1.

XX 06-DEC-2001.

XX 01-JUN-2001; 2001WO-JF004662.

XX 01-JUN-2000; 2000JP-00164798.

XX (NISN ) NISSHINBO IND INC.

XX (SYST-) SYSTEM RES INC.

XX Inoko H, Kagiya T, Ichihara T, Matsumura Y, Moriya S, Nishida M;

XX WPI; 2002-122074/16.

XX Human leukocyte antigen (HLA) typing, useful for judging HLA genotypes of  
PT individuals e.g. by determining immunogenetic differences when  
PT transplanting between them.

XX Claim 10; Page 296; 345pp; Japanese.

XX The invention relates to a typing kit for judging human leukocyte antigen  
CC (HLA) genotype of a sample by hybridising a substrate on which 10-24 base



CC oligonucleotides (ABL30512-ABL31809) originating in the sequences of  
CC genes e.g. belonging to HLA class I antigens on human genome and  
CC containing gene polymorphisms as alloantigens have been immobilised as  
CC primers for amplification of cleaved nucleic acids relating to gene  
CC polymorphisms. The method is useful for judging HLA genotypes of  
CC individuals by determining immunogenetic differences before transplanting  
CC between them, providing genetic information to decide compatibility of  
CC organ and tissue for transplantation e.g. of bone marrow, kidney, liver,  
CC pancreas, Langerhans islet in pancreas and cornea, susceptibility  
CC diagnosis of genetic diseases and identifying individuals  
XX  
SQ Sequence 17 BP; 1 A; 6 C; 7 G; 3 T; 0 U; 0 Other;  
  
Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
Qy 379 CGGAGCGAGTCCCGC 394  
Db 16 CGGAGCCAGTCCACGC 1  
  
RESULT 445  
ACN09761  
ID ACN09761 standard; RNA; 17 BP.  
XX  
AC ACN09761;  
XX  
DT 22-APR-2004 (first entry)  
XX  
DE WNV minus strand Inozyme substrate SEQ ID NO 9764.  
XX  
KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;  
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;  
KW encephalitis; myocarditis; meningitis; infection; hepatitis;  
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;  
KW Amberzyme; Zinzyme; ss.  
XX  
OS West Nile Virus.  
XX  
PN WO200268637-A2.  
XX  
PD 06-SEP-2002.  
XX  
PF 19-OCT-2001; 2001WO-US048350.  
XX  
PR 20-OCT-2000; 2000US-024241P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MCSW/) MCSWIGGEN J A.  
XX  
PI Blatt L, Mcswiggen JA;  
XX  
DR WPI; 2002-706994/76.  
XX  
XX  
XX New nucleic acid molecule that modulates replication of West Nile Virus  
XX (WNV), useful for treating a condition related to WNV infection e.g.  
XX pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.  
XX  
XX Claim 23; SEQ ID NO 9764; 495pp; English.  
XX  
XX The invention relates to nucleic acid molecules that modulate replication  
XX of the West Nile Virus (WNV). The nucleic acid molecules are useful for  
XX treating a condition related to WNV infection e.g. pancreatitis,  
XX encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,  
XX liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid  
XX molecule is selected from the group of ribozymes consisting of  
XX Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The  
XX nucleic acid molecules further comprise at least five ribose residues, at  
XX least ten 2'-O-methyl modifications, phosphorothioate linkages on at  
XX least three of the 5' terminal nucleotides and a 3' end modification of a  
XX 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080  
XX are claimed; however, SEQ ID NO 9764 and 17502-17514 are not given  
XX in the specification. The present sequence is that of a nucleic acid  
XX molecule of the invention  
XX  
SQ Sequence 17 BP; 1 A; 6 C; 7 G; 3 T; 0 U; 0 Other;

CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given  
CC in the specification. The present sequence is that of a nucleic acid  
CC molecule of the invention  
XX  
SQ Sequence 17 BP; 2 A; 5 C; 5 G; 0 T; 5 U; 0 Other;  
  
Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 62.5%; Pred. No. 4e+02;  
Matches 10; Conservative 4; Mismatches 2; Indels 0; Gaps 0;  
  
Qy 316 TCAGCCGCGGTCTCT 331  
Db 1 UGAGCCGCGAGUCUCU 16  
  
RESULT 446  
ACN04592/C  
ID ACN04592 standard; RNA; 17 BP.  
XX  
AC ACN04592;  
XX  
DT 22-APR-2004 (first entry)  
XX  
DE WNV Zinzyme substrate SEQ ID NO 4595.  
XX  
KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;  
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;  
KW encephalitis; myocarditis; meningitis; infection; hepatitis;  
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;  
KW Amberzyme; Zinzyme; ss.  
XX  
OS West Nile Virus.  
XX  
PN WO200268637-A2.  
XX  
PD 06-SEP-2002.  
XX  
PF 19-OCT-2001; 2001WO-US048350.  
XX  
PR 20-OCT-2000; 2000US-024241P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MCSW/) MCSWIGGEN J A.  
XX  
PI Blatt L, Mcswiggen JA;  
XX  
DR WPI; 2002-706994/76.  
XX  
XX  
XX New nucleic acid molecule that modulates replication of West Nile Virus  
XX (WNV), useful for treating a condition related to WNV infection e.g.  
XX pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.  
XX  
XX Claim 23; SEQ ID NO 4595; 495pp; English.  
XX  
XX The invention relates to nucleic acid molecules that modulate replication  
XX of the West Nile Virus (WNV). The nucleic acid molecules are useful for  
XX treating a condition related to WNV infection e.g. pancreatitis,  
XX encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,  
XX liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid  
XX molecule is selected from the group of ribozymes consisting of  
XX Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The  
XX nucleic acid molecules further comprise at least five ribose residues, at  
XX least ten 2'-O-methyl modifications, phosphorothioate linkages on at  
XX least three of the 5' terminal nucleotides and a 3' end modification of a  
XX 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080  
XX are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given  
XX in the specification. The present sequence is that of a nucleic acid  
XX molecule of the invention  
XX  
SQ Sequence 17 BP; 2 A; 5 C; 5 G; 0 T; 3 U; 0 Other;  
  
Query Match 2.8%; Score 12.8; DB 1; Length 17;

Best Local Similarity 87.5%; Pred. No. 4e+02; Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 316 TCAGCGCGGCTCTCT 331  
Db 16 TGAGCGCGGCTCTCT 1

## RESULT 447

ACN14999  
ID ACN14999 standard; RNA; 17 BP.

XX AC ACN14999;  
XX DT 22-APR-2004 (first entry)

XX WNV minus strand Amberzyme substrate SEQ ID NO 15002.  
XX WNV; West Nile Virus; antiinflammatory; cytosstatic; hepatotropic;  
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;  
KW encephalitis; myocarditis; meningitis; infection; hepatitis;  
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;  
KW Amberzyme; Zinzyne; ss.  
XX OS West Nile Virus.  
XX PN WO200268637-A2.  
XX PD 06-SEP-2002.  
XX PF 19-OCT-2001; 2001WO-US048350.  
XX PR 20-OCT-2000; 2000US-0242411P.  
XX PA (RIBO-) RIBOZYME PHARM INC.  
XX PA (BLAT/) BLATT L.  
XX PA (MCSW/) MCSWIGGEN J A.  
XX PI Blatt L, Mcswiggen JA;  
XX WPI; 2002-706994/76.

XX New nucleic acid molecule that modulates replication of West Nile Virus (WNV), useful for treating a condition related to WNV infection e.g. pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.

PS Claim 23; SEQ ID NO 15002; 495pp; English.

XX The invention relates to nucleic acid molecules that modulate replication of the West Nile Virus (WNV). The nucleic acid molecules are useful for treating a condition related to WNV infection e.g. pancreatitis, encephalitis, myocarditis, meningitis, neurologic infection, hepatitis, liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid molecule is selected from the group of ribozymes consisting of Hammerhead, inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyne. The nucleic acid molecules further comprise at least five ribose residues, at least ten 2'-O-methyl modifications, phosphorothioate linkages on at least three of the 5' terminal nucleotides and a 3' end modification of a 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080 are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given in the specification. The present sequence is that of a nucleic acid molecule of the invention

SQ Sequence 17 BP; 2 A; 7 C; 2 G; 0 T; 6 U; 0 Other;

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 56.2%; Pred. No. 4e+02; Matches 9; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 103 TCTCGCTGACTTTCAG 118  
Db 2 UCUCUCAGACCUUCAG 17

RESULT 448  
ACN00415/C  
ID ACN00415 standard; RNA; 17 BP.

XX AC ACN00415;  
XX DT 22-APR-2004 (first entry)

XX WNV Hammerhead Ribozyme substrate SEQ ID NO 405.  
XX WNV; West Nile Virus; antiinflammatory; cytosstatic; hepatotropic;  
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;  
KW encephalitis; myocarditis; meningitis; infection; hepatitis;  
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;  
KW Amberzyme; Zinzyne; ss.  
XX OS West Nile Virus.  
XX PN WO200268637-A2.  
XX PD 06-SEP-2002.  
XX PF 19-OCT-2001; 2001WO-US048350.  
XX PR 20-OCT-2000; 2000US-0242411P.  
XX PA (RIBO-) RIBOZYME PHARM INC.  
XX PA (BLAT/) BLATT L.  
XX PA (MCSW/) MCSWIGGEN J A.  
XX PI Blatt L, Mcswiggen JA;  
XX WPI; 2002-706994/76.

XX New nucleic acid molecule that modulates replication of West Nile Virus (WNV), useful for treating a condition related to WNV infection e.g. pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.

PS Claim 23; SEQ ID NO 405; 495pp; English.

XX The invention relates to nucleic acid molecules that modulate replication of the West Nile Virus (WNV). The nucleic acid molecules are useful for treating a condition related to WNV infection e.g. pancreatitis, encephalitis, myocarditis, meningitis, neurologic infection, hepatitis, liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid molecule is selected from the group of ribozymes consisting of Hammerhead, inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyne. The nucleic acid molecules further comprise at least five ribose residues, at least ten 2'-O-methyl modifications, phosphorothioate linkages on at least three of the 5' terminal nucleotides and a 3' end modification of a 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080 are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given in the specification. The present sequence is that of a nucleic acid molecule of the invention

SQ Sequence 17 BP; 6 A; 2 C; 7 G; 0 T; 2 U; 0 Other;

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02; Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 103 TCTCGCTGACTTTCAG 118  
Db 16 TCTCTGACCTTCAG 1

RESULT 449  
ACN03272/C  
ID ACN03272 standard; RNA; 17 BP.

XX AC ACN03272;  
XX

DT 22-APR-2004 (first entry)  
 XX WNV Inozyme substrate SEQ ID NO 3275.  
 DE  
 XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;  
 KW virucide; neuroprotective; antibacterial; replication; pancreatitis;  
 KW encephalitis; myocarditis; meningitis; infection; hepatitis;  
 KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;  
 KW Amberzyme; Zinzyme; ss.  
 XX  
 XX West Nile Virus.  
 OS  
 XX WO200268637-A2.  
 XX  
 XX 06-SEP-2002.  
 XX  
 XX 19-OCT-2001; 2001WO-US048350.  
 XX  
 XX 20-OCT-2000; 2000US-0242411P.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA (BLATT) BLATT L.  
 PA (MCSW/) MCSWIGGEN J A.  
 XX  
 PI Blatt L, Mcswiggen JA;  
 XX  
 XX WPI; 2002-706994/76.  
 DR  
 XX New nucleic acid molecule that modulates replication of West Nile Virus  
 PT (WNV), useful for treating a condition related to WNV infection e.g.  
 PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.  
 XX  
 XX Claim 23; SEQ ID NO 3275; 495pp; English.  
 PS  
 XX The invention relates to nucleic acid molecules that modulate replication  
 CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for  
 CC treating a condition related to WNV infection e.g. pancreatitis,  
 CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,  
 CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid  
 CC molecule is selected from the group of ribozymes consisting of  
 CC Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The  
 CC nucleic acid molecules further comprise at least five ribose residues, at  
 CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at  
 CC least three of the 5' terminal nucleotides and a 3' end modification of a  
 CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080  
 CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given  
 CC in the specification. The present sequence is that of a nucleic acid  
 CC molecule of the invention  
 XX  
 SQ Sequence 17 BP; 5 A; 5 C; 5 G; 0 T; 2 U; 0 Other;  
 Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 Qy 316 TCAGCCGCGGCTCTCT 331  
 Db | ||||| |||||  
 17 TGAGCCGCGAGGCTCT 2  
 RESULT 450  
 ACN14010  
 ID ACN14010 standard; RNA; 17 BP.  
 XX  
 XX ACN14010;  
 AC  
 XX 22-APR-2004 (first entry)  
 DT  
 XX WNV minus strand DNAzyme substrate SEQ ID NO 14013.  
 DE  
 XX WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;  
 KW virucide; neuroprotective; antibacterial; replication; pancreatitis;  
 KW encephalitis; myocarditis; meningitis; infection; hepatitis;

KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;  
 KW Amberzyme; Zinzyme; ss.  
 XX  
 XX West Nile Virus.  
 OS  
 XX WO200268637-A2.  
 XX  
 XX 06-SEP-2002.  
 XX  
 XX 19-OCT-2001; 2001WO-US048350.  
 XX  
 XX 20-OCT-2000; 2000US-0242411P.  
 XX  
 XX (RIBO-) RIBOZYME PHARM INC.  
 PA (BLATT) BLATT L.  
 PA (MCSW/) MCSWIGGEN J A.  
 XX  
 PI Blatt L, Mcswiggen JA;  
 XX  
 XX WPI; 2002-706994/76.  
 DR  
 XX New nucleic acid molecule that modulates replication of West Nile Virus  
 PT (WNV), useful for treating a condition related to WNV infection e.g.  
 PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.  
 XX  
 XX Claim 23; SEQ ID NO 14013; 495pp; English.  
 PS  
 XX The invention relates to nucleic acid molecules that modulate replication  
 CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for  
 CC treating a condition related to WNV infection e.g. pancreatitis,  
 CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,  
 CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid  
 CC molecule is selected from the group of ribozymes consisting of  
 CC Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The  
 CC nucleic acid molecules further comprise at least five ribose residues, at  
 CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at  
 CC least three of the 5' terminal nucleotides and a 3' end modification of a  
 CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080  
 CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given  
 CC in the specification. The present sequence is that of a nucleic acid  
 CC molecule of the invention  
 XX  
 SQ Sequence 17 BP; 2 A; 6 C; 3 G; 0 T; 6 U; 0 Other;  
 Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 56.2%; Pred. No. 4e+02;  
 Matches 9; Conservative 5; Mismatches 2; Indels 0; Gaps 0;  
 Qy 103 TCCTGCTGACTTTCAG 118  
 Db :||| :||| :|||  
 1 UCUCUCUGACCUUCAG 16  
 RESULT 451  
 ADA99826  
 ID ADA99826 standard; DNA; 17 BP.  
 XX  
 XX ADA99826;  
 AC  
 XX 20-NOV-2003 (first entry)  
 DT  
 XX Human MD23 scanning oligonucleotide SEQ ID 815.  
 DE  
 XX Cytostatic; immunostimulant; gene therapy; vaccine; human;  
 KW zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;  
 KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;  
 KW developmental disorder; ss.  
 XX  
 XX Homo sapiens.  
 OS  
 XX EPI281758-A2.  
 PN  
 XX 05-FEB-2003.  
 PD

XX PF 30-JUL-2002; 2002EP-00016874.  
XX XX  
XX PR 02-AUG-2001; 2001US-00922181.  
XX XX  
XX PA (AEOM-) AEOMICA INC.  
XX XX  
XX PI Shannon M, Gu Y, Nguyen C;  
XX XX  
XX DR WPI; 2003-423107/40.  
XX XX  
XX PT New zinc finger-containing proteins and nucleic acids, useful in  
XX PT manufacturing a medicament for treating or preventing a disorder  
XX PT associated with decreased or increased expression or activity of MD23,  
XX PT MD24, MD27 or MD212, e.g. cancer.  
XX XX  
XX PS Example 8; SEQ ID NO 815; 103pp; English.  
XX XX  
XX CC The present invention relates to novel human zinc finger-containing  
XX CC proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is  
XX CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,  
XX CC MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome  
XX CC 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,  
XX CC or in manufacturing a medicament for treating or preventing a disorder,  
XX CC associated with decreased or increased expression or activity of MD23,  
XX CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic  
XX CC acids and proteins are also useful for diagnosing or monitoring a disease  
XX CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic  
XX CC acids can also be used as probes to detect and characterize gross  
XX CC alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are  
XX CC useful in constructing microarrays for measuring gene expression. The  
XX CC proteins are useful as therapeutic agents for gene therapy or as  
XX CC vaccines. The present sequence was used to illustrate the invention.  
XX XX  
XX SQ Sequence 17 BP; 2 A; 2 C; 8 G; 5 T; 0 U; 0 Other;  
  
Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02; Mismatches 0; Gaps 0;  
Matches 14; Conservative 0; Indels 2; Indels 0; Gaps 0;  
  
QY 25 GGGGTGGTGGCCATT 40  
DB 1 GGGGTGGGCGCCATT 16  
|||||  
  
RESULT 452  
ADA99824  
ID ADA99824 standard; DNA; 17 BP.  
XX AC ADA99824;  
XX XX  
XX DT 20-NOV-2003 (first entry)  
XX XX  
XX DE Human MD23 scanning oligonucleotide SEQ ID 813.  
XX XX  
XX KW Cytostatic; immunostimulant; gene therapy; vaccine; human;  
XX KW zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;  
XX KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;  
XX KW developmental disorder; ss.  
XX XX  
XX OS Homo sapiens.  
XX XX  
XX PN EP1281758-A2.  
XX XX  
XX PD 05-FEB-2003.  
XX XX  
XX PF 30-JUL-2002; 2002EP-00016874.  
XX XX  
XX PR 02-AUG-2001; 2001US-00922181.  
XX XX  
XX PA (AEOM-) AEOMICA INC.  
XX XX  
XX PI Shannon M, Gu Y, Nguyen C;

XX WPI; 2003-423107/40.  
XX XX  
XX PT New zinc finger-containing proteins and nucleic acids, useful in  
XX PT manufacturing a medicament for treating or preventing a disorder  
XX PT associated with decreased or increased expression or activity of MD23,  
XX PT MD24, MD27 or MD212, e.g. cancer.  
XX XX  
XX PS Example 8; SEQ ID NO 813; 103pp; English.  
XX XX  
XX CC The present invention relates to novel human zinc finger-containing  
XX CC proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is  
XX CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,  
XX CC MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome  
XX CC 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,  
XX CC or in manufacturing a medicament for treating or preventing a disorder,  
XX CC associated with decreased or increased expression or activity of MD23,  
XX CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic  
XX CC acids and proteins are also useful for diagnosing or monitoring a disease  
XX CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic  
XX CC acids can also be used as probes to detect and characterize gross  
XX CC alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are  
XX CC useful in constructing microarrays for measuring gene expression. The  
XX CC proteins are useful as therapeutic agents for gene therapy or as  
XX CC vaccines. The present sequence was used to illustrate the invention.  
XX XX  
XX SQ Sequence 17 BP; 2 A; 3 C; 8 G; 4 T; 0 U; 0 Other;  
  
Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02; Mismatches 0; Gaps 0;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
  
QY 24 AGGGGTGGTGGCCATT 39  
DB 2 AGGGGTGGGCGCCATT 17  
|||||  
  
RESULT 453  
ABZ62075/C  
ID ABZ62075 standard; RNA; 17 BP.  
XX AC ABZ62075;  
XX XX  
XX DT 21-MAR-2003 (first entry)  
XX XX  
XX DE Human H-Ras DNAzyme target #866.  
XX XX  
XX KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;  
XX KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;  
XX KW anti-rheumatic; cancer; AIDS; ss.  
XX XX  
XX OS Homo sapiens.  
XX XX  
XX PN WO200297114-A2.  
XX XX  
XX PD 05-DEC-2002.  
XX XX  
XX PF 29-MAY-2002; 2002WO-US016840.  
XX XX  
XX PR 29-MAY-2001; 2001US-0294140P.  
XX PR 06-JUN-2001; 2001US-0296249P.  
XX PR 10-SEP-2001; 2001US-0318471P.  
XX XX  
XX PA (RIBO-) RIBOZYME PHARM INC.  
XX XX  
XX PI Mcswiggen J;  
XX XX  
XX DR WPI; 2003-140484/13.  
XX XX  
XX PT Novel short interfering RNA and enzymatic nucleic acid useful for  
XX PT treating cancer, modulates the expression of a nucleic acid encoding  
XX PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.  
XX XX



```
Db      |||||
16 GCCGCGGTGGCGCGG 1

RESULT 456
ABZ64563/c
ID ABZ64563 standard; RNA; 17 BP.
XX
XX
AC ABZ64563;
XX
XX 21-MAR-2003 (first entry)
XX
XX Human HER2 DNzyme substrate #20.
XX
XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
XX Homo sapiens.
OS
XX WO200297114-A2.
FN
XX
XX 05-DEC-2002.
PD
XX
XX 29-MAY-2002; 2002WO-US016840.
PF
XX
XX 29-MAY-2001; 2001US-0294140P.
PR
XX 06-JUN-2001; 2001US-0296249P.
PR
XX 10-SEP-2001; 2001US-0318471P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX
XX Mcswiggen J;
PI
XX
XX WPI; 2003-140484/13.
DR
XX
XX Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
XX Claim 4; Page 133; 185pp; English.
PS
XX
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
XX Sequence 17 BP; 1 A; 12 C; 3 G; 0 T; 1 U; 0 Other;
SQ
Query Match 2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 21 GCGAGGGGTGGTGCC 36
Db |||||

RESULT 457
ABZ61388
ID ABZ61388 standard; RNA; 17 BP.
XX
XX ABZ61388;
AC
XX
XX 21-MAR-2003 (first entry)
DT
```

```
XX
DE
XX
XX Human H-Ras DNzyme target #179.
KW
KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
XX Homo sapiens.
OS
XX WO200297114-A2.
FN
XX
XX 05-DEC-2002.
PD
XX
XX 29-MAY-2002; 2002WO-US016840.
PF
XX
XX 29-MAY-2001; 2001US-0294140P.
PR
XX 06-JUN-2001; 2001US-0296249P.
PR
XX 10-SEP-2001; 2001US-0318471P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX
XX Mcswiggen J;
PI
XX
XX WPI; 2003-140484/13.
DR
XX
XX Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
XX Claim 58; Page 114; 185pp; English.
PS
XX
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
XX Sequence 17 BP; 0 A; 6 C; 8 G; 0 T; 3 U; 0 Other;
SQ
Query Match 2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 75.0%; Pred. No. 4e+02;
Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 202 TCCCGGGGACCTGCGG 217
Db |||||
1 UCCUGGGGCGCGG 16

RESULT 458
ACD59623
ID ACD59623 standard; RNA; 17 BP.
XX
XX
AC ACD59623;
XX
XX 24-SEP-2003 (first entry)
DT
XX
XX HCV DNzyme substrate sequence #1425.
DE
XX
XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
```

XX OS Hepatitis C virus.  
 XX PN WO200281494-A1.  
 XX PD 17-OCT-2002.  
 XX PF 26-MAR-2002; 2002WO-US009187.  
 XX PR 26-MAR-2001; 2001US-00817879.  
 XX PR 08-JUN-2001; 2001US-00877478.  
 XX PR 08-JUN-2001; 2001US-0296876P.  
 XX PR 24-OCT-2001; 2001US-0335059P.  
 XX PR 05-DEC-2001; 2001US-0337055P.  
 XX PA (RIBO-) RIBOZYME PHARM INC.  
 XX PA (BLAT/) BLATT L.  
 XX PA (MACE/) MACEJAK D.  
 XX PA (MCSW/) MCSWIGGEN J.  
 XX PA (MORR/) MORRISSEY D.  
 XX PA (PAVC/) PAVCO P.  
 XX PA (LEEP/) LEE P.  
 XX PA (DRAP/) DRAPER K.  
 XX PA (ROBE/) ROBERTS E.  
 XX PI Blatt L, Macejak D, Mcswiggen J, Morrissey J, Pavco P, Lee P;  
 XX PI Draper K, Roberts E;  
 XX DR WPI; 2003-229207/22.  
 XX PT Novel compound useful for treating cirrhosis, liver failure,  
 XX PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
 XX PT infection.  
 XX PS Claim 1; Page 259; 387pp; English.  
 XX CC The present invention relates to nucleic acid molecules which modulate  
 XX CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
 XX CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
 XX CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,  
 XX CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed  
 XX CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
 XX CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
 XX CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
 XX CC DNA. The nucleic acids may be used to modulate the expression of HBV  
 XX CC genes and HBV viral replication. Also disclosed is a method for screening  
 XX CC compounds and/or potential therapies directed against HBV, and compounds  
 XX CC that modulate the expression and/or replication of HCV. The compounds and  
 XX CC disease states related to HBV and HCV infection, replication and gene  
 XX CC expression such as cirrhosis, liver failure, and hepatocellular  
 XX CC carcinoma. The present sequence represents a substrate for one of the HCV  
 XX CC DNazyme or minus strand DNazyme sequences disclosed in the present  
 XX CC invention  
 XX SQ Sequence 17 BP; 1 A; 1 C; 11 G; 0 T; 4 U; 0 Other;  
 Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 75.0%; Pred. No. 4e+02;  
 Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;  
 Qy 20 TGGAGGGGTGGTGGC 35  
 Db :||||| :|||  
 2 UCGGAGGGGUGGUGGC 17  
 RESULT 459  
 ACD64287/c  
 ID ACD64287 standard; RNA; 17 BP.  
 XX AC ACD64287;  
 XX DT 30-SEP-2003 (first entry)

XX HCV minus strand DNazyme substrate sequence #1478.  
 XX DE  
 XX KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
 KW RNA stability; RNA expression; RNA synthesis; antisense;  
 KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;  
 KW amberzyme, G-cleaver ribozyme; decoy molecule; aptamer;  
 KW HBV reverse transcriptase; Enhancer I region; viral replication;  
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
 KW virucide; antiinflammatory; substrate; ss.  
 XX OS Hepatitis C virus.  
 XX PN WO200281494-A1.  
 XX PD 17-OCT-2002.  
 XX PF 26-MAR-2002; 2002WO-US009187.  
 XX PR 26-MAR-2001; 2001US-00817879.  
 XX PR 08-JUN-2001; 2001US-00877478.  
 XX PR 08-JUN-2001; 2001US-0296876P.  
 XX PR 24-OCT-2001; 2001US-0335059P.  
 XX PR 05-DEC-2001; 2001US-0337055P.  
 XX PA (RIBO-) RIBOZYME PHARM INC.  
 XX PA (BLAT/) BLATT L.  
 XX PA (MACE/) MACEJAK D.  
 XX PA (MCSW/) MCSWIGGEN J.  
 XX PA (MORR/) MORRISSEY D.  
 XX PA (PAVC/) PAVCO P.  
 XX PA (LEEP/) LEE P.  
 XX PA (DRAP/) DRAPER K.  
 XX PA (ROBE/) ROBERTS E.  
 XX PI Blatt L, Macejak D, Mcswiggen J, Morrissey J, Pavco P, Lee P;  
 XX PI Draper K, Roberts E;  
 XX DR WPI; 2003-229207/22.  
 XX PT Novel compound useful for treating cirrhosis, liver failure,  
 XX PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
 XX PT infection.  
 XX PS Claim 1; Page 301; 387pp; English.  
 XX CC The present invention relates to nucleic acid molecules which modulate  
 XX CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
 XX CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
 XX CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,  
 XX CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed  
 XX CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
 XX CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
 XX CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
 XX CC DNA. The nucleic acids may be used to modulate the expression of HBV  
 XX CC genes and HBV viral replication. Also disclosed is a method for screening  
 XX CC compounds and/or potential therapies directed against HBV, and compounds  
 XX CC that modulate the expression and/or replication of HCV. The compounds and  
 XX CC disease states related to HBV and HCV infection, replication and gene  
 XX CC expression such as cirrhosis, liver failure, and hepatocellular  
 XX CC carcinoma. The present sequence represents a substrate for one of the HCV  
 XX CC DNazyme or minus strand DNazyme sequences disclosed in the present  
 XX CC invention  
 XX SQ Sequence 17 BP; 1 A; 6 C; 6 G; 0 T; 4 U; 0 Other;  
 Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 433 GGACTCGGCTCACACA 448

CC carcinoma. The present sequence represents a substrate for one of the HCV  
CC DNazyme or minus strand DNazyme sequences disclosed in the present  
CC invention  
XX  
SQ Sequence 17 BP; 3 A; 6 C; 7 G; 0 T; 1 U; 0 Other;  
Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02; Indels 0; Gaps 0;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
Oy 208 GGACCTGGCGGGTTC 223  
Db 16 GCACCTGGCGGGTTC 1  
RESULT 461  
ACD52324/C  
ID ACD52324 standard; RNA; 17 BP.  
XX  
AC ACD52324;  
XX  
DT 24-SEP-2003 (first entry)  
XX  
DE HBV inozyme substrate sequence #352.  
XX  
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;  
KW RNA stability; RNA expression; RNA synthesis; antisense;  
KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;  
KW amberyze; G-cleaver ribozyme; decoy molecule; aptamer;  
KW HBV reverse transcriptase; Enhancer I region; viral replication;  
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;  
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;  
KW virucide; antiinflammatory; substrate; ss.  
XX  
OS Hepatitis B virus.  
XX  
PN WO200281494-A1.  
XX  
PD 17-OCT-2002.  
XX  
PF 26-MAR-2002; 2002WO-US009187.  
XX  
PR 26-MAR-2001; 2001US-00817879.  
PR 08-JUN-2001; 2001US-00877478.  
PR 08-JUN-2001; 2001US-0296876P.  
PR 24-OCT-2001; 2001US-0335059P.  
PR 05-DEC-2001; 2001US-0337055P.  
XX  
PA (RIBO-) RIBOZYME PHARM INC.  
PA (BLAT/) BLATT L.  
PA (MACE/) MACEJAK D.  
PA (MCSW/) MCSWIGGEN J.  
PA (MORR/) MORRISSEY D.  
PA (PVC/) PAVCO P.  
PA (LEEP/) LEE P.  
PA (DRAP/) DRAPER K.  
PA (ROBE/) ROBERTS E.  
XX  
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;  
PI Draper K, Roberts E;  
XX  
DR WPI; 2003-229207/22.  
XX  
PT Novel compound useful for treating cirrhosis, liver failure,  
PT hepatocellular carcinoma, or condition associated with hepatitis C virus  
PT infection.  
XX  
PS Claim 1; Page 299; 387pp; English.  
XX  
CC The present invention relates to nucleic acid molecules which modulate  
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or  
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense  
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,  
CC inozymes, zinzymes, amberyzes, and G-cleaver ribozymes. Also disclosed  
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
CC DNA. The nucleic acids may be used to modulate the expression of HBV  
CC genes and HBV viral replication. Also disclosed is a method for screening  
CC compounds and/or potential therapies directed against HBV, and compounds  
CC that modulate the expression and/or replication of HCV. The compounds  
CC methods of the invention are useful for the treatment of degenerative and  
CC disease states related to HBV and HCV infection, replication and gene  
CC expression such as cirrhosis, liver failure, and hepatocellular



CC inozymes, zinczymes, amberyzymes, and G-cleaver ribozymes. Also disclosed  
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse  
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well  
CC as oligonucleotides that specifically bind the Enhancer I region of HBV  
CC DNA. The nucleic acids may be used to modulate the expression of HBV  
CC genes and HBV viral replication. Also disclosed is a method for screening  
CC compounds and/or potential therapies directed against HBV, and compounds  
CC that modulate the expression and/or replication of HCV. The compounds and  
CC methods of the invention are useful for the treatment of degenerative and  
CC disease states related to HBV and HCV infection, replication and gene  
CC expression such as cirrhosis, liver failure, and hepatocellular  
CC carcinoma. The present sequence represents a substrate for one of the HBV  
CC ribozyme, inozyme, G-cleaver, zinczyme, DNzyme or amberyzyme sequences  
CC disclosed in the present invention

XX SQ Sequence 17 BP; 1 A; 8 C; 4 G; 0 T; 4 U; 0 Other;  
Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02; Mismatches 0; Gaps 0;  
Matches 14; Conservative 0; Indels 2; Indels 0; Gaps 0;

Qy 117 AGCGGGCGGAAAGCC 132  
Db 16 AGCGGGCGGTAGACC 1  
|||||

RESULT 462  
ADFI3468/C  
ID ADFI3468 standard; DNA; 17 BP.

XX AC ADFI3468;

XX DT 12-FEB-2004 (first entry)

XX DE SNX9 (Sorting Nexin 9), BaySNP 6743, PCR primer #2.

XX KW Cardiant; antiarteriosclerotic; vasotropic; cerebroprotective;  
XX hypotensive; gene therapy; human; SNX9; Sorting Nexin 9; PCR; primer; ss.

XX OS Homo sapiens.

XX PN WO2003072813-A2.

XX PD 04-SEP-2003.

XX PF 14-FEB-2003; 2003WO-EP001514.

XX PR 27-FEB-2002; 2002EP-00004258.

XX PA (FARB ) BAYER AG.

XX PI Ströpp U, Schwes S, Kallabis H;

XX DR WPI; 2003-712738/67.

XX PT New isolated polynucleotide encoded by a phenotype-associated gene,  
XX useful for prognosticating statin therapy response, and diagnosing or  
XX treating cardiovascular diseases, such as hypertension, myocardial  
XX infarction and stroke.

XX FS Example 1; Page 69; 182pp; English.

XX CC The present invention relates to human phenotype-associated (PA) genes (I  
XX : ADFI3307-ADFI3386) which contain a Single Nucleotide Polymorphism  
XX (SNP). The SNP is given in the sequence as a variant nucleotide. Also  
XX claimed are methods for screening for agents which regulate the activity  
XX of a PA gene and reagents that modulate the activity of a PA polypeptide  
XX or a polynucleotide where the reagent is identified by the screening  
XX methods. The methods and compositions of the present invention are useful  
XX for prognosticating, diagnosing and treating cardiovascular diseases,  
XX such as atherosclerosis, hypertension, restenosis, arterial inflammation,  
XX myocardial infarction and stroke. The present sequence is a PCR primer,  
XX used in the examples from the invention.

XX SQ Sequence 17 BP; 1 A; 11 C; 2 G; 3 T; 0 U; 0 Other;  
Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02; Mismatches 0; Gaps 0;  
Matches 14; Conservative 0; Indels 2; Indels 0; Gaps 0;

Qy 334 GGGCGGAGGGCGAGGT 349  
Db 16 GGGCGGAGGGCGAGGT 1  
|||||

RESULT 463  
ABZ96390/C  
ID ABZ96390 standard; DNA; 17 BP.

XX AC ABZ96390;

XX DT 17-OCT-2003 (first entry)

XX DE Human C/EBP antisense fragment no.2250.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;  
XX antiinflammatory steroid; ubiquinone; antiinflammatory; anti-allergic;  
XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;  
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;  
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;  
XX lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPIG-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
XX Miller S, Tang L, Shahabuddin S;

XX DR WPI; 2003-229219/22.

XX PT Pharmaceutical composition for treating ailments associated with impaired  
XX respiration, has oligo(s) antisense to specific gene(s) or its  
XX corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or  
XX ubiquinone.

XX PS Disclosure; SEQ ID NO 11632; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a  
XX first active agent comprising an oligonucleotide antisense to the  
XX initiation codon, coding region, 5' or 3' end genomic flanking regions,  
XX 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of  
XX junctions of genes encoding a polypeptide associated with lung and/or  
XX nasal airway dysfunction and a second active agent comprising an  
XX antiinflammatory steroid and ubiquinone. A composition of the invention  
XX has antiinflammatory, anti-allergic, antiasthmatic, hypotensive,  
XX immunosuppressive, and cytostatic activity. The composition may have a  
XX use in antisense gene therapy. The composition is useful for treating or  
XX preventing a respiratory, lung or malignant disease or condition, also  
XX for enhancing the prophylactic or therapeutic respiratory effect of an  
XX antiinflammatory steroid in a subject, for reducing or depleting levels  
XX of, or reducing sensitivity to adenosine, reducing levels of adenosine  
XX receptor, producing bronchodilation, increasing levels of ubiquinone or  
XX lung surfactant in a subject's tissue, or treating bronchoconstriction,  
XX lung inflammation, lung allergies, or a respiratory disease or condition.  
XX Note: The sequence data for this patent is not represented in the printed  
XX specification, but was obtained in electronic format directly from WIPO  
XX at ftp.wipo.int/pub/published\_pct\_sequences

```

XX SQ Sequence 17 BP; 0 A; 12 C; 5 G; 0 T; 0 U; 0 Other;
Query Match 2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 257 GCGGTGCGCGCGCGGC 272
Db 16 GCGGCGCGCGCGCGGC 1

RESULT 464
ADL48687
ID ADL48687 standard; RNA; 17 BP.
XX
AC ADL48687;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human IKK-gamma substrate sequence #1197.
XX
KW antisense oligonucleotide; neurite growth inhibitor; NOGO;
KW prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
KW protein kinase PKR; cerebrovascular accident;
KW central nervous system injury; CNS injury; spinal cord injury; cancer;
KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
KW restenosis; asthma; Crohn's disease; diabetes; obesity;
KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;
KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
KW allergy; asthma; allergic rhinitis; atopic dermatitis; Human IKK-gamma;
KW substrate; ds.
XX
OS Unidentified.
XX
PN WO200281628-A2.
XX
PD 17-OCT-2002.
XX
PF 03-APR-2002; 2002WO-US010512.
XX
PR 05-APR-2001; 2001US-00827395.
PR 29-MAY-2001; 2001US-0294412P.
PR 28-AUG-2001; 2001US-0315315P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fosnaugh K;
XX
WPI; 2003-058513/05.
XX
PT Novel enzymatic nucleic acid that down-regulates expression of neurite
PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
PT protein kinase PKR genes, for treating cancer and inflammatory disease.
XX
PS Claim 59; SEQ ID NO 2220; 317pp; English.
XX
CC The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC that down regulate the expression or inhibit the function of a receptor
CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC invention are useful for treating: cerebrovascular accident, central
CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC disease, lupus, multiple sclerosis, transplant/graft rejection,
CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC nucleic acids of the invention are also useful for down-regulating the
CC expression of a target gene and as a diagnostic tool to examine genetic
CC drifts and mutations within diseased cells or to detect the presence of a
CC target RNA in a cell. The present RNA sequence represents a human IKK-
CC gamma substrate sequence.

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```
XX SQ Sequence 17 BP; 0 A; 6 C; 8 G; 0 T; 3 U; 0 Other;
Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 68.8%; Pred. No. 4e+02;
Matches 11; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 182 GCTGCTGGCCGCTTCG 197
Dd 2 GCUGCGGCGCGCUCG 17

RESULT 466
ADL51527/C
ID ADL51527 standard; RNA; 17 BP.
XX
AC ADL51527;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human PTGDR substrate sequence #646.
XX
KW antisense oligonucleotide; neurite growth inhibitor; NOGO;
KW prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
KW protein kinase PKR; cerebrovascular accident;
KW central nervous system injury; CNS injury; spinal cord injury; cancer;
KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
KW restenosis; asthma; Crohn's disease; diabetes; obesity;
KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;
KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
KW allergy; asthma; allergic rhinitis; atopic dermatitis; human PTGDR;
KW substrate; ds.
XX
OS Unidentified.
XX
PN WO200281628-A2.
XX
PD 17-OCT-2002.
XX
PF 03-APR-2002; 2002WO-US010512.
XX
PR 05-APR-2001; 2001US-00827395.
PR 29-MAY-2001; 2001US-0294412P.
PR 28-AUG-2001; 2001US-0315315P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fornaugh K;
XX
DR WPI; 2003-058513/05.
XX
PT Novel enzymatic nucleic acid that down-regulates expression of neurite
PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
PT protein kinase PKR genes, for treating cancer and inflammatory disease.
XX
PS Claim 161; SEQ ID NO 5060; 317pp; English.
XX
CC The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC that down regulate the expression or inhibit the function of a receptor
CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC invention are useful for treating: cerebrovascular accident, central
CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC disease, lupus, multiple sclerosis, transplant/graft rejection,
CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC nucleic acids of the invention are also useful for down-regulating the
CC expression of a target gene and as a diagnostic tool to examine genetic
CC drifts and mutations within diseased cells or to detect the presence of a
CC target RNA in a cell. The present RNA sequence represents a human PKR
CC substrate sequence.
```

```
XX SQ Sequence 17 BP; 2 A; 7 C; 8 G; 0 T; 0 U; 0 Other;
Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 389 CCCCGCGCGCGCGCG 404
Dd 16 CTCGCGCGCGCGCTCG 1

RESULT 467
ADM09504
ID ADM09504 standard; RNA; 17 BP.
XX
AC ADM09504;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human NOGO receptor amberzyme substrate sequence #59.
XX
KW antisense oligonucleotide; neurite growth inhibitor; NOGO;
KW prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
KW protein kinase PKR; cerebrovascular accident;
KW central nervous system injury; CNS injury; spinal cord injury; cancer;
KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
KW restenosis; asthma; Crohn's disease; diabetes; obesity;
KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;
KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
KW allergy; asthma; allergic rhinitis; atopic dermatitis;
KW NOGO receptor amberzyme; substrate; ss.
XX
OS Unidentified.
XX
PN WO200281628-A2.
XX
PD 17-OCT-2002.
XX
PF 03-APR-2002; 2002WO-US010512.
XX
PR 05-APR-2001; 2001US-00827395.
PR 29-MAY-2001; 2001US-0294412P.
PR 28-AUG-2001; 2001US-0315315P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fornaugh K;
XX
DR WPI; 2003-058513/05.
XX
PT Novel enzymatic nucleic acid that down-regulates expression of neurite
PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
PT protein kinase PKR genes, for treating cancer and inflammatory disease.
XX
PS Claim 9; SEQ ID NO 899; 317pp; English.
XX
CC The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC that down regulate the expression or inhibit the function of a receptor
CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC invention are useful for treating: cerebrovascular accident, central
CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC disease, lupus, multiple sclerosis, transplant/graft rejection,
CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC nucleic acids of the invention are also useful for down-regulating the
CC expression of a target gene and as a diagnostic tool to examine genetic
CC drifts and mutations within diseased cells or to detect the presence of a
CC target RNA in a cell. The present RNA sequence represents a human NOGO
CC receptor amberzyme substrate sequence.
```

XX  
SQ Sequence 17 BP; 0 A; 6 C; 8 G; 0 T; 3 U; 0 Other;  
Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 75.0%; Pred. No. 4e+02;  
Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;  
QY 263 GGCCCGGGGCTTCC 278  
|||||||: :||  
Db 2 GGCCCGGGGUGUCC 17  
RESULT 468  
ADL47866  
ID ADL47866 standard; RNA; 17 BP.  
XX  
AC ADL47866;  
XX  
DT 20-MAY-2004 (first entry)  
XX  
DE Human IKK-gamma substrate sequence #376.  
XX  
KW antisense oligonucleotide; neurite growth inhibitor; NOGO;  
KW prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;  
KW protein kinase PKR; cerebrovascular accident;  
KW central nervous system injury; CNS injury; spinal cord injury; cancer;  
KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;  
KW restenosis; asthma; Crohn's disease; diabetes; obesity;  
KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;  
KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;  
KW allergy; asthma; allergic rhinitis; atopic dermatitis; Human IKK-gamma;  
KW substrate; ds.  
XX  
OS Unidentified.  
XX  
OS Unidentified.  
XX  
PN WO200281628-A2.  
XX  
PD 17-OCT-2002.  
XX  
XX 03-APR-2002; 2002WO-US010512.  
XX  
XX 05-APR-2001; 2001US-00827395.  
PR 29-MAY-2001; 2001US-0294412P.  
PR 28-AUG-2001; 2001US-0315315P.  
XX  
XX (RIBO-) RIBOZYME PHARM INC.  
XX  
XX Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fosnaugh K;  
PI WPI; 2003-058513/05.  
XX  
XX Novel enzymatic nucleic acid that down-regulates expression of neurite  
PT growth inhibitor receptor, prostaglandin D2 receptor, ikappaB kinase or  
PT protein kinase PKR genes, for treating cancer and inflammatory disease.  
XX  
XX Claim 59; SEQ ID NO 1399; 317pp; English.  
XX  
XX The invention comprises nucleic acids (e.g. antisense oligonucleotides)  
CC that down regulate the expression or inhibit the function of a receptor  
CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),  
CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the  
CC invention are useful for treating: cerebrovascular accident, central  
CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,  
CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,  
CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune  
CC disease, lupus, multiple sclerosis, transplant/graft rejection, and  
CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic  
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The  
CC nucleic acids of the invention are also useful for down-regulating the  
CC expression of a target gene and as a diagnostic tool to examine genetic  
CC drifts and mutations within diseased cells or to detect the presence of a  
CC target RNA in a cell. The present RNA sequence represents a human IKK-  
CC gamma substrate sequence.

XX  
SQ Sequence 17 BP; 1 A; 6 C; 8 G; 0 T; 2 U; 0 Other;  
Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 75.0%; Pred. No. 4e+02;  
Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;  
QY 249 TGGAGGCGCGGTCGG 264  
:|||||||: :||  
Db 2 UGGAGGCGCGGCUCC 17  
RESULT 469  
ADM54056/C  
ID ADM54056 standard; mRNA; 17 BP.  
XX  
AC ADM54056;  
XX  
DT 03-JUN-2004 (first entry)  
XX  
DE Human GRID mRNA substrate sequence #331.  
XX  
KW Human; ss; GRID; Grb2-related with insert domain; hammerhead ribozyme;  
KW NCH ribozyme; G-cleaver ribozyme; zinzyme; DNazyme; inozyme;  
KW hairpin ribozyme; tissue rejection; graft rejection; leukaemia.  
XX  
OS Homo sapiens.  
XX  
PN US2003134806-A1.  
XX  
PD 17-JUL-2003.  
XX  
XX 23-PEB-2001; 2001US-00792818.  
PF 10-FEB-2000; 2000US-0181594P.  
PR (JARV/) JARVIS T.  
PA (CARL/) CARLOWITZ I V.  
PA (MCSW/) MCSWIGGEN J.  
PA (HAMB/) HAMBELIN P A.  
PA (ELLJ/) ELLIS J H.  
XX  
XX Jarvis T, Carlowitz IV, Mcswiggen J, Hamblin PA, Ellis JH;  
PI WPI; 2003-829646/77.  
XX  
XX New nucleic acid molecule that down-regulates expression of Grb2-related  
PT with insert domain (GRID) gene, useful for treating a condition  
PT associated with the level of GRID, e.g. tissue/graft rejection and  
PT leukemia.  
XX  
XX Claim 4; SEQ ID NO 331; 74pp; English.  
XX  
XX The invention relates to a nucleic acid molecule that down-regulates  
CC expression of Grb2-related with insert domain (GRID) gene, e.g. a  
CC hammerhead ribozyme, NCH ribozyme, G-cleaver ribozyme, Zinzyme, DNazyme,  
CC amberzyme, Inozyme or hairpin ribozyme. Also include are a mammalian cell  
CC including the novel nucleic acid molecule, reducing GRID activity in a  
CC cell by contacting the cell with the novel nucleic acid molecule, an  
CC treating a patient having a condition associated with the level of GRID  
CC (e.g. tissue/graft rejection or leukaemia) by contacting the cell with  
CC the novel nucleic acid molecule, cleaving RNA of a GRID gene by  
CC contacting the cell with the novel nucleic acid molecule, an expression  
CC vector comprising a nucleic acid sequences (encoding at least the novel  
CC nucleic acid molecule in a manner that allows its expression), a  
CC mammalian cell including the expression vector and an enzymatic nucleic  
CC acid molecule that cleaves RNA derived from a GRID gene. The nucleic acid  
CC molecule is useful for treating a condition associated with the level of  
CC GRID, e.g. tissue/graft rejection and leukaemia. The present sequence is  
CC a target region for the enzymatic nucleic acids of the invention.  
XX  
XX Sequence 17 BP; 3 A; 4 C; 9 G; 0 T; 1 U; 0 Other;

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02; 2; Indels 0; Gaps 0;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 200 CCTCCCGGGGACCTCC 215  
Db 16 CCTCCCGGGGACCTCC 1

RESULT 470  
ABD20299/c  
ID ABD20299 standard; DNA; 17 BP.  
XX  
AC ABD20299;  
XX  
XX 29-JUL-2004 (first entry)  
XX  
XX Human C/BPN DNA fragment 2250.  
XX  
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;  
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;  
XX surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;  
XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;  
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;  
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;  
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;  
XX pulmonary transplantation rejection; ds.  
XX  
XX Homo sapiens.  
XX  
XX WO200285309-A2.  
XX  
XX 31-OCT-2002.  
XX  
XX 23-APR-2002; 2002WO-US013143.  
XX  
XX 24-APR-2001; 2001US-0286036P.  
XX  
XX (EPIG-) EPIGENESIS PHARM INC.  
XX  
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;  
XX Miller S, Tang L, Shahabuddin S;  
XX  
XX WPI; 2003-093058/08.  
XX  
XX Pharmaceutical composition for treating asthma, has antisense  
XX oligonucleotide containing less percentage of adenosine, targeted to  
XX nucleic acids associated with lung airway or lung dysfunction, and  
XX bronchodilating agent.  
XX  
XX Claim 15; SEQ ID NO 11632; 763pp; English.  
XX  
XX This invention describes a novel composition (a) a first active agent,  
XX comprising oligonucleotides, effective for alleviating  
XX bronchoconstriction, respiratory tract inflammation, allergies and  
XX reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,  
XX surfactant depletion or hyposecretion, when administered to a mammal. The  
XX oligonucleotides are derived from a gene encoding or regulating  
XX expression of a target polypeptide associated with lung airway or lung  
XX dysfunction or cancer and can be anti-sense to the corresponding mRNA.  
XX The invention also describes a kit, that comprises: (a) a delivery  
XX device, in separate containers, (b) the oligonucleotides, (c)  
XX instructions for adding a carrier and for use of the kit. The composition  
XX of the invention has anti-allergic, anti-inflammatory, antiasthmatic,  
XX analgesic, hypotensive, immunosuppressive and cytostatic activity, is a  
XX beta-adrenergic agonist. The composition is useful for preventing or  
XX treating a respiratory, lung or malignant disease. The administered  
XX composition comprises oligo and is administered to reduce the production  
XX or availability, or to increase the degradation of the target mRNA or to  
XX reduce the amount of target polypeptide present in the lungs. The  
XX pulmonary obstruction, and/or bronchoconstriction and/or lung  
XX inflammation, allergies and/or surfactant hypoproduction are associated  
XX with a disease or condition such as pulmonary vasoconstriction,

CC inflammation, allergies, asthma, impeded respiration, respiratory  
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary  
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary  
CC transplantation rejection, pulmonary infections, bronchitis or cancer.  
CC The reduced adenosine content of the anti-sense oligos corresponding to  
CC thymidines present in the target RNA serves to prevent the breakdown of  
CC the oligonucleotides into products that free adenosine into the system  
CC e.g., lung, brain, heart, kidney, etc., tissue environment and thereby, to  
CC prevent any unwanted effects due to it  
XX  
SQ Sequence 17 BP; 0 A; 12 C; 5 G; 0 T; 0 U; 0 Other;  
Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02; 2; Indels 0; Gaps 0;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 257 GCGGTCGGCGCGGGC 272  
Db 16 GCGGTCGGCGCGGGC 1

RESULT 471  
ADK13270  
ID ADK13270 standard; DNA; 17 BP.  
XX  
AC ADK13270;  
XX  
XX 20-MAY-2004 (first entry)  
XX  
XX Human glioma endothelial marker (GEM) long tag SEQ ID NO:448.  
XX  
XX glioma; brain tissue; neoplastic; glioma endothelial marker; GEM;  
XX anticancer; antiglioma; immune response; cytostatic;  
XX multi-drug sensitive glioma; human; long tag; ss.  
XX  
XX Homo sapiens.  
XX  
XX Synthetic.  
XX  
XX WO2004016758-A2.  
XX  
XX 26-FEB-2004.  
XX  
XX 15-AUG-2003; 2003WO-US025614.  
XX  
XX 15-AUG-2002; 2002US-0403390P.  
XX  
XX 01-APR-2003; 2003US-0458978P.  
XX  
XX (GENZ ) GENZYME CORP.  
XX (UYJO ) UNIV JOHNS HOPKINS.  
XX  
XX Madden SI, Wang CU, Cook BP, Lattera J, Walter K;  
XX WPI; 2004-247973/23.  
XX  
XX Diagnosing glioma by detecting expression product of any one of 255  
XX genes, glioma endothelial markers, in brain tissue sample suspected of  
XX being neoplastic, and comparing the expression with expression in normal  
XX brain tissue sample.  
XX  
XX Example 2; SEQ ID NO 448; 114pp; English.  
XX  
XX The present invention describes a method (M1) for aiding in the diagnosis  
XX of glioma. (M1) involves detecting an expression product of at least one  
XX gene (I) in a first brain tissue sample (T) suspected of being  
XX neoplastic, where (I) is chosen from any one of 255 genes (glioma  
XX endothelial markers (GEMs)) as given in specification, and comparing the  
XX expression of (I) in (T) with expression of (I) in a second normal brain  
XX tissue sample (R), where increased expression of (I) in (T) relative to  
XX (R), identifies (T) as likely to be neoplastic. Also described: (1)  
XX treating (M2) glioma involves contacting cells of the glioma with an  
XX antibody that specifically binds to an extracellular epitope; (2)  
XX identifying (M3) a test compound as potential anticancer or antiglioma  
XX drug involves contacting a test compound with the cell which expresses

CC (1), monitoring an expression product of the at least one gene and  
 CC identifying test compound as a potential anticancer drug if it decreases  
 CC the expression of at least one gene; (3) identifying (M4) a test compound  
 CC as potential anticancer or antglioma drug involves contacting a test  
 CC compound with the cell which expresses mRNA of at least one gene  
 CC identified by a tag as described above, monitoring mRNA of the gene, and  
 CC identifying the test compound as a potential anticancer drug if it  
 CC decreases the expression of at least one gene; and (4) inducing (M5) an  
 CC immune response to glioma involves administering to a mammal, a protein  
 CC or (I). (I) have cytostatic activities, and can be used to trigger immune  
 CC destruction of glioma cells, and as immune response inducers. (M1) is  
 CC useful for aiding in diagnosing glioma. (M2) is useful for treating multi  
 CC -drug sensitive glioma in a human. (M5) is useful for inducing an immune  
 CC response to a glioma in a mammal having glioma or in a mammal who has had  
 CC a glioma surgically removed. The present sequence represents a human GEM  
 CC long tag oligonucleotide, which is used in the exemplification of the  
 CC present invention.

SQ Sequence 17 BP; 1 A; 8 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 177 TGTGAGCTGCTGGCCC 192  
 Db 2 TGTGAGCGGCTGCCCC 17  
 ||||| ||||| |||||

RESULT 472  
 ADM58919/C  
 ID ADM58919 standard; RNA; 17 BP.

XX AC ADM58919;

XX DT 03-JUN-2004 (first entry)

XX DE Hepatitis B virus (HBV) RNA target sequence #1053.

XX KW Hepatitis B virus; HBV; ss; enzymatic nucleic acid; RNA cleavage;  
 KW Hepatitis B virus infection; hepatitis; hepatocellular carcinoma;  
 KW cirrhosis; liver failure; lamivudine; interferon; genetic drift;  
 KW virucide; hepatotropic; antiinflammatory; cytostatic.

XX OS Hepatitis B virus.

XX PN US2004054156-A1.

XX PD 18-MAR-2004.

XX PF 15-JAN-2003; 2003US-00342902.

XX PR 14-MAY-1992; 92US-00882712.

XX PR 07-FEB-1994; 94US-00193627.

XX PR 08-NOV-1999; 99US-00436430.

XX PR 20-MAR-2000; 2000US-00531025.

XX PR 09-AUG-2000; 2000US-00636385.

XX PR 24-OCT-2000; 2000US-00696347.

XX PR 08-JUN-2001; 2001US-00877478.

XX PA (DRAP/) DRAPER K.

XX PA (BLAT/) BLATT L.

XX PA (MCSW/) MCSWIGGEN J A.

XX PA (MORR/) MORRISSEY D.

XX PI Draper K, Blatt L, Mcswiggen JA, Morrissey D;

XX WPI; 2004-247781/23.

XX DR Novel enzymatic nucleic acid molecule such as DNazymes and inozymes  
 XX PT specifically cleaving RNA derived from hepatitis B virus and comprising  
 XX PT one or more binding arms, useful for treating hepatitis and cirrhosis.

PS Disclosure; SEQ ID NO 1053; 122pp; English.

XX CC The invention relates to an enzymatic nucleic acid molecule that  
 CC specifically cleaves RNA derived from hepatitis B virus (HBV) and  
 CC comprising one or more binding arms, without requiring the presence of a  
 CC 2'-OH group within the molecule for activity. The nucleic acids are  
 CC useful for treating hepatitis B virus infection. The nucleic acids are  
 CC hepatocellular carcinoma, cirrhosis and liver failure, either alone or in  
 CC combination with other therapies such as lamivudine and interferons. The  
 CC nucleic acids are useful as diagnostic tools to examine genetic drift and  
 CC mutations within diseased cells, for detecting the presence of HBV RNA in  
 CC a cell, for the study of RNA and for down-regulating gene expression of  
 CC target genes in bacterial, fungal, viral, plant or mammalian cells. This  
 CC sequence represents an HBV RNA target sequence, used in the scope of the  
 CC invention. Note: the sequence data for this patent is also available in  
 CC electronic format from USPTO at seqdata.uspto.gov/sequence.html.

SQ Sequence 17 BP; 1 A; 8 C; 4 G; 0 T; 4 U; 0 Other;

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 117 AGCGGCGGAAAGCC 132  
 Db 16 AGCGGCGGTAGACC 1  
 ||||| ||||| |||||

RESULT 473

AD183671

ID AD183671 standard; RNA; 17 BP.

XX AC AD183671;

XX DT 03-JUN-2004 (first entry)

XX DE HCV DNazyme substrate sequence #917.

XX KW ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;  
 KW HCV infection; type I interferon; DNazyme.

XX OS Hepatitis C virus.

XX PN US2003125270-A1.

XX PD 03-JUL-2003.

XX PF 18-DEC-2000; 2000US-00740332.

XX PR 18-DEC-2000; 2000US-00740332.

XX PA (BLAT/) BLATT L.

XX PA (MCSW/) MCSWIGGEN J.

XX PA (ROBE/) ROBERTS E.

XX PA (PACV/) PAVCO P A.

XX PA (MACE/) MACEJACK D.

XX PI Blatt L, Mcswiggen J, Roberts E, Pavco PA, Macejack D;

XX WPI; 2004-031273/03.

XX PT Enzymatic nucleic acid molecules which specifically cleave RNA derived  
 XX PT from hepatitis C virus (HCV), useful for the treatment of HCV infections,  
 XX PT especially in combination with type I interferon therapy.

XX PS Claim 1; SEQ ID NO 917; 198pp; English.

XX CC The invention relates to an enzymatic nucleic acid molecule which  
 CC specifically cleaves RNA derived from hepatitis C virus (HCV), in which  
 CC the binding arms of the enzymatic nucleic acid molecule comprises  
 CC sequences complementary to any of the defined substrate sequences given  
 CC in the specification. The nucleic acid molecule may be administered for  
 CC the treatment of HCV infections, especially in combination with type I

CC interferons. The present sequence represents a HCV DNazyme substrate  
 CC sequence.  
 XX  
 SQ Sequence 17 BP; 1 A; 9 C; 5 G; 0 T; 2 U; 0 Other;  
 Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 75.0%; Pred. No. 4e+02;  
 Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;  
 Qy 210 ACCTGCGCGGGTGC 225  
 |||:|||||:|  
 Db 2 ACCUGCGCGCGCUCG 17  
 RESULT 474  
 ADI86393/C  
 ID ADI86393 standard; RNA; 17 BP.  
 XX  
 AC ADI86393;  
 XX  
 DT 03-JUN-2004 (first entry)  
 XX  
 DE HCV DNazyme substrate sequence #3639.  
 XX  
 KW ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;  
 KW HCV infection; type I interferon; DNazyme.  
 XX  
 OS Hepatitis C virus.  
 XX  
 PN US2003125270-A1.  
 XX  
 PD 03-JUL-2003.  
 XX  
 PF 18-DEC-2000; 2000US-00740332.  
 XX  
 PR 18-DEC-2000; 2000US-00740332.  
 XX  
 PA (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (ROBE/) ROBERTS E.  
 PA (PAVC/) PAVCO P A.  
 PA (MACE/) MACEJACK D.  
 XX  
 PI Blatt L, Mcswiggen J, Roberts E, Pavco PA, Macejack D;  
 XX  
 DR WPI; 2004-031273/03.  
 XX  
 PT Enzymatic nucleic acid molecules which specifically cleave RNA derived  
 from hepatitis C virus (HCV), useful for the treatment of HCV infections,  
 especially in combination with type I interferon therapy.  
 XX  
 PS Claim 1; SEQ ID NO 3639; 198pp; English.  
 XX  
 CC The invention relates to an enzymatic nucleic acid molecule which  
 specifically cleaves RNA derived from hepatitis C virus (HCV), in which  
 the binding arms of the enzymatic nucleic acid molecule comprises  
 sequences complementary to any of the defined substrate sequences given  
 in the specification. The nucleic acid molecule may be administered for  
 the treatment of HCV infections, especially in combination with type I  
 interferons. The present sequence represents a HCV DNazyme substrate  
 CC sequence.  
 XX  
 SQ Sequence 17 BP; 3 A; 6 C; 7 G; 0 T; 1 U; 0 Other;  
 Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 Qy 208 GGACCTGCGCGGGTGC 223  
 |||:|||||:|  
 Db 16 GCACCTGCGCGGCTC 1

---

RESULT 475  
 ADI84179  
 ID ADI84179 standard; RNA; 17 BP.  
 XX  
 AC ADI84179;  
 XX  
 DT 03-JUN-2004 (first entry)  
 XX  
 DE HCV DNazyme substrate sequence #1425.  
 XX  
 KW ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;  
 KW HCV infection; type I interferon; DNazyme.  
 XX  
 OS Hepatitis C virus.  
 XX  
 PN US2003125270-A1.  
 XX  
 PD 03-JUL-2003.  
 XX  
 PF 18-DEC-2000; 2000US-00740332.  
 XX  
 PR 18-DEC-2000; 2000US-00740332.  
 XX  
 PA (BLAT/) BLATT L.  
 PA (MCSW/) MCSWIGGEN J.  
 PA (ROBE/) ROBERTS E.  
 PA (PAVC/) PAVCO P A.  
 PA (MACE/) MACEJACK D.  
 XX  
 PI Blatt L, Mcswiggen J, Roberts E, Pavco PA, Macejack D;  
 XX  
 DR WPI; 2004-031273/03.  
 XX  
 PT Enzymatic nucleic acid molecules which specifically cleave RNA derived  
 from hepatitis C virus (HCV), useful for the treatment of HCV infections,  
 especially in combination with type I interferon therapy.  
 XX  
 PS Claim 1; SEQ ID NO 1425; 198pp; English.  
 XX  
 CC The invention relates to an enzymatic nucleic acid molecule which  
 specifically cleaves RNA derived from hepatitis C virus (HCV), in which  
 the binding arms of the enzymatic nucleic acid molecule comprises  
 sequences complementary to any of the defined substrate sequences given  
 in the specification. The nucleic acid molecule may be administered for  
 the treatment of HCV infections, especially in combination with type I  
 interferons. The present sequence represents a HCV DNazyme substrate  
 CC sequence.  
 XX  
 SQ Sequence 17 BP; 1 A; 1 C; 11 G; 0 T; 4 U; 0 Other;  
 Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 75.0%; Pred. No. 4e+02;  
 Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;  
 Qy 20 TGGAGAGGGTGGTGGC 35  
 :|||||:|  
 Db 2 UGGAGAGGGGUGGUGGC 17  
 RESULT 476  
 ADI86509/C  
 ID ADI86509 standard; RNA; 17 BP.  
 XX  
 AC ADI86509;  
 XX  
 DT 03-JUN-2004 (first entry)  
 XX  
 DE HCV DNazyme substrate sequence #3755.  
 XX  
 KW ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;  
 KW HCV infection; type I interferon; DNazyme.  
 XX  
 OS Hepatitis C virus.

XX PN US2003125270-A1.  
 XX PD 03-JUL-2003.  
 XX PF 18-DEC-2000; 2000US-00740332.  
 XX PR 18-DEC-2000; 2000US-00740332.  
 XX PA (BLATT/) BLATT L.  
 XX PA (MCSW/) MCSWIGGEN J.  
 XX PA (ROBE/) ROBERTS E.  
 XX PA (PAVC/) PAVCO P A.  
 XX PA (MACE/) MACEJACK D.  
 XX PI Blatt L, Mcswiggen J, Roberts E, Pavco PA, Macejack D;  
 XX DR WPI; 2004-031273/03.  
 XX PT Enzymatic nucleic acid molecules which specifically cleave RNA derived  
 XX PT from hepatitis C virus (HCV), useful for the treatment of HCV infections,  
 XX PT especially in combination with type I interferon therapy.  
 XX PS Claim 1; SEQ ID NO 3755; 198pp; English.  
 XX CC The invention relates to an enzymatic nucleic acid molecule which  
 XX CC specifically cleaves RNA derived from hepatitis C virus (HCV), in which  
 XX CC the binding arms of the enzymatic nucleic acid molecule comprises  
 XX CC sequences complementary to any of the defined substrate sequences given  
 XX CC in the specification. The nucleic acid molecule may be administered for  
 XX CC the treatment of HCV infections, especially in combination with type I  
 XX CC interferons. The present sequence represents a HCV DNase substrate  
 XX CC sequence.  
 XX SQ Sequence 17 BP; 1 A; 6 C; 6 G; 0 T; 4 U; 0 Other;  
 Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 433 GGACTCGGCTCACACA 448  
 DB 17 GGACTGGGCCACACA 2  
 RESULT 477  
 ADN44083/C  
 ID ADN44083 standard; DNA; 17 BP.  
 AC ADN44083;  
 XX 15-JUL-2004 (first entry)  
 DT Mutant cell identification-related mutagenic oligonucleotide SeqID752.  
 DE cell identification; oligonucleotide-directed sequence alteration;  
 XX selectable phenotype; transgenic plant; herbicide resistance;  
 KW sterile plant; abiotic stress tolerance; herbicide resistance;  
 KW amino acid production; ss.  
 XX Zea mays.  
 OS Synthetic.  
 XX WO2004033708-A2.  
 PN 22-APR-2004.  
 XX 07-OCT-2003; 2003WO-US031862.  
 XX 07-OCT-2002; 2002US-0416983P.  
 XX 07-MAR-2003; 2003US-0453360P.  
 XX (UYDE ) UNIV DELAWARE.  
 PA (NAPR-) NAPRO BIO THERAPEUTICS INC.  
 XX Kmiec EB, Van Brabant A;  
 XX WPI; 2004-340941/31.

PA (NAPR-) NAPRO BIO THERAPEUTICS INC.  
 XX Kmiec EB, Van Brabant A;  
 XX WPI; 2004-340941/31.  
 DR Identifying a cell with a desired oligonucleotide-directed sequence  
 PT alteration at a nucleic acid target site within the cell by identifying  
 PT the desired sequence alteration in cells selected for the presence of a  
 PT selectable phenotype.  
 XX Example 24; SEQ ID NO 752; 303pp; English.  
 XX PS This invention relates to a novel method of identifying a cell having a  
 XX CC desired oligonucleotide-directed sequence alteration at a first nucleic  
 XX CC acid target site within the cell. The method comprises identifying the  
 XX CC desired sequence alteration in cells that have been selected for the  
 XX CC presence of a selectable phenotype conferred by a concurrent  
 XX CC oligonucleotide-directed sequence alteration at a second nucleic acid  
 XX CC target site within the cells. The method is useful in identifying a cell  
 XX CC having a desired oligonucleotide-directed sequence alteration at a first  
 XX CC nucleic acid target site within the cell. The method may be useful for  
 XX CC the production of plants with herbicide resistance, male or female  
 XX CC sterile plants, abiotic stress tolerance, albino plants or plants with  
 XX CC altered amino acid production as well as for use in mammalian cell lines.  
 XX CC The present sequence is that of a mutagenic oligonucleotide which was  
 XX CC used in the exemplification of the invention.  
 XX SQ Sequence 17 BP; 3 A; 7 C; 5 G; 2 T; 0 U; 0 Other;  
 Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 410 CTGAGCTGGGACGT 425  
 DB 17 CTGAGCTGAGGCCGT 2  
 RESULT 478  
 ADN44082  
 ID ADN44082 standard; DNA; 17 BP.  
 AC ADN44082;  
 XX 15-JUL-2004 (first entry)  
 DT Mutant cell identification-related mutagenic oligonucleotide SeqID751.  
 DE cell identification; oligonucleotide-directed sequence alteration;  
 XX selectable phenotype; transgenic plant; herbicide resistance;  
 KW sterile plant; abiotic stress tolerance; herbicide resistance;  
 KW amino acid production; ss.  
 XX Zea mays.  
 OS Synthetic.  
 XX WO2004033708-A2.  
 PN 22-APR-2004.  
 XX 07-OCT-2003; 2003WO-US031862.  
 XX 07-OCT-2002; 2002US-0416983P.  
 XX 07-MAR-2003; 2003US-0453360P.  
 XX (UYDE ) UNIV DELAWARE.  
 PA (NAPR-) NAPRO BIO THERAPEUTICS INC.  
 XX Kmiec EB, Van Brabant A;  
 XX WPI; 2004-340941/31.



PT Identifying a cell with a desired oligonucleotide-directed sequence  
PT alteration at a nucleic acid target site within the cell by identifying  
PT the desired sequence alteration in cells selected for the presence of a  
PT selectable phenotype.

XX Example 24; SEQ ID NO 751; 303pp; English.

XX This invention relates to a novel method of identifying a cell having a  
CC desired oligonucleotide-directed sequence alteration at a first nucleic  
CC acid target site within the cell. The method comprises identifying the  
CC desired sequence alteration in cells that have been selected for the  
CC presence of a selectable phenotype conferred by a concurrent  
CC oligonucleotide-directed sequence alteration at a second nucleic acid  
CC target site within the cells. The method is useful in identifying a cell  
CC having a desired oligonucleotide-directed sequence alteration at a first  
CC nucleic acid target site within the cell. The method may be useful for  
CC the production of plants with herbicide resistance, male or female  
CC sterile plants, abiotic stress tolerance, albino plants or plants with  
CC altered amino acid production as well as for use in mammalian cell lines.  
CC The present sequence is that of a mutagenic oligonucleotide which was  
CC used in the exemplification of the invention.

XX Sequence 17 BP; 2 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 410 CTGAGCTGTGGACGT 425  
Db 1 CTGAGCTGTGGACGT 16

RESULT 479  
ADQ80740/C  
ID ADQ80740 standard; DNA; 17 BP.

XX AC ADQ80740;

XX 23-SEP-2004 (first entry)

XX Porcine TSSC5 intron 1 DNA sequence polymorphism oligonucleotide.

XX Anorectic; Antidiabetic; Muscular; Gene Therapy; CpG island;  
KW IGF2 gene intron 3; muscle mass; fat deposition; teat number; obesity;  
KW muscle deficiency; diabetes; SNP; single nucleotide polymorphism; ss.

XX Sus scrofa.

XX Key Location/Qualifiers  
FH variation replace(10,T)  
FT /\*tag= a  
FT /standard\_name= "Single\_nucleotide\_polymorphism"

XX EPI437418-A1.

XX 14-JUL-2004.

XX 10-JAN-2003; 2003EP-00075091.

XX 10-JAN-2003; 2003EP-00075091.

XX (UYLI-) UNIV LIEGE.  
PA (MELI-) MELICA HB.  
PA (GENT-) GENTEC BV.

XX Andersson L, Andersson G, Georges M, Buys N;  
XX WPI; 2004-501307/48.

XX Selecting an animal for desired genotypic or potential phenotypic  
PT properties such as muscle mass and/or fat deposition, comprises testing  
PT for a single nucleotide polymorphism in intron 3 of the IGF2 gene.

XX Example 1; Page 20; 38pp; English.

XX The present invention relates to a method (M1) for selecting an animal  
CC for having desired genotypic or potential phenotypic properties. (M1)  
CC comprises testing the animal for the presence of a nucleic acid  
CC modification affecting the activity of an evolutionary conserved CpG  
CC island located in intron 3 of an IGF2 gene; and/or binding of a nuclear  
CC factor to an IGF2 gene. The nuclear factor is capable of binding to a  
CC stretch of nucleotides which in the wild type pig, mouse or human IGF2  
CC gene is part of an evolutionary conserved CpG island, located in intron 3  
CC of the IGF2 gene. The stretch is functionally equivalent to (ADQ80709).  
CC The nucleic acid modification in ADQ80709 comprises a G to A transition  
CC at IGF2-intron3-nt3072. (M1) is useful for selecting an animal with  
CC properties related to muscle mass, fat deposition, and/or teat number.  
CC Also claimed is a method (M2) for modulating mRNA transcription of an  
CC IGF2 gene by modulating the activity of an evolutionarily conserved CpG  
CC island located in intron 3 of an IGF2 gene and/or modulating binding of a  
CC nuclear factor to an IGF2 gene. Also claimed is a method (M3) for  
CC identifying a compound capable of modulating mRNA transcription of an  
CC IGF2 gene and a method (M4) for identifying a compound capable of  
CC modulating binding of a nuclear factor to an IGF2 gene. (M2) is useful  
CC for modulating mRNA transcription of an IGF2 gene in a cell or organism.  
CC (M3) and (M4) are useful for identifying compounds capable of modulating  
CC mRNA transcription of an IGF2 gene and/or modulating binding of a nuclear  
CC factor to an IGF2 gene. Compounds identified are potentially useful for  
CC treating obesity, muscle deficiencies and diabetes. The present sequence  
CC is a porcine sequence tagged sites (STS) comprising a DNA sequence  
CC polymorphism, which was isolated in an example from the invention.

XX Sequence 17 BP; 0 A; 14 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 4e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 13 GTGGGCTGGGAGGG 28  
Db 17 GGGGGCGGGGAGGG 2

RESULT 480  
ADQ92762/C  
ID ADQ92762 standard; RNA; 17 BP.

XX AC ADQ92762;

XX 21-OCT-2004 (first entry)

XX Androgen receptor siRNA sense strand, SEQ ID 338.

XX Endocrine; Antiseborrheic; Dermatological; Depilatory; RNA interference;  
KW small interfering RNA; siRNA;  
KW androgen signal transduction pathway protein;  
KW androgen signal transduction; androgen receptor; hair loss;  
KW hyperandrogenic condition; androgenic alopecia; male pattern alopecia;  
KW acne vulgaris; seborrhea; female hirsutism; prostatic hypertrophy; ds.  
XX Synthetic.

XX Key Location/Qualifiers  
FH misc\_feature 16..17  
FT /\*tag= a  
FT /note= "2 deoxynucleotide overhang"

XX WO2004063331-A2.

XX 29-JUL-2004.

XX 05-JAN-2004; 2004WO-US000128.

XX 03-JAN-2003; 2003US-0437842P.

XX

PA (GENC-) GENCIA CORP.  
 XX Kahn S;  
 PI WPI; 2004-561892/54.  
 DR Inhibitory nucleic acid that inhibits expression of an androgen signal  
 XX transduction pathway protein useful for treating hair loss, comprises a  
 PT double stranded RNA having a partial sequence encoding a pathway protein  
 PT in one strand.  
 XX  
 PS Claim 11; Page 41; 92pp; English.  
 XX  
 CC The present invention relates to novel small interfering RNAs (siRNAs),  
 CC comprising a double stranded RNA, where one strand comprises a partial  
 CC nucleic acid sequence of an androgen signal transduction pathway protein,  
 CC and where the double-stranded RNA inhibits translation of mRNA encoding  
 CC the nucleic acid sequence of the androgen signal transduction pathway  
 CC protein thereby blocking the androgen signal transduction pathway.  
 CC androgen signal transduction pathway protein is chosen from isozymes I  
 CC and II of 5-alpha reductase (ADQ92425 and ADQ92516), the androgen  
 CC receptor (ADQ92571), aromatase (ADQ92896), 3-alpha-  
 CC hydroxysteroiddehydrogenase (ADQ93182), 3-beta-  
 CC hydroxysteroiddehydrogenase (ADQ93360), 3-beta-  
 CC hydroxysteroiddehydrogenase-4-5-isomerase (ADQ93541), 17-beta-  
 CC hydroxysteroidoxidoreductase (ADQ93722), and steroid sulfatase  
 CC (ADQ93770). The siRNAs of the invention are useful for reducing hair loss  
 CC in a mammal which involves contacting several mammal's hair cells with  
 CC the siRNA, where the siRNA interferes with the translation of mRNA of the  
 CC androgen signal transduction protein. The siRNAs are useful for treating  
 CC hyperandrogenic conditions of androgenic alopecia, including male pattern  
 CC alopecia, acne vulgaris, seborrhea, and female hirsutism and prostatic  
 CC hypertrophy. The present sequence is the sense strand for one such siRNA  
 CC of the invention.  
 XX  
 SQ Sequence 17 BP; 5 A; 5 C; 4 G; 2 T; 1 U; 0 Other;  
 Query Match 2.8%; Score 12.8; DB 1; Length 17;  
 Best Local Similarity 87.5%; Pred. No. 4e+02;  
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
 QY 174 AAATGTCAGTCGTGG 189  
 DB 17 AACTGTCAGTCGTGG 2  
 RESULT 481  
 AAZ07300/c  
 ID AAZ07300 standard; DNA; 25 BP.  
 XX  
 AC AAZ07300;  
 XX  
 DT 22-OCT-1999 (first entry)  
 XX  
 DE Human telomerase RNA gene (hTR) promoter specific primer h11c.  
 XX  
 KW Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;  
 KW gene therapy; thymidine kinase gene; anticancer therapy; human;  
 KW mutagenesis; PCR primer; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN WO9938964-A2.  
 XX  
 PD 05-AUG-1999.  
 XX  
 PF 29-JAN-1999; 99WO-GB000308.  
 XX  
 PR 29-JAN-1998; 98GB-00001902.  
 XX  
 PA (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.  
 XX

PI Keith WN;  
 XX WPI; 1999-479183/40.  
 DR Mouse and human telomerase RNA gene promoters, useful for tumor specific  
 XX gene therapy.  
 PT  
 PT Disclosure; Fig 12; 109pp; English.  
 PS  
 XX The invention relates to promoter regions from mouse and human telomerase  
 CC RNA (TR) component genes. The TR gene promoter can be linked to a  
 CC heterologous gene, especially a gene encoding a cytotoxin, for therapy of  
 CC cancer, especially neoplasias. The telomerase is necessary for the  
 CC unrestricted proliferative capacity of many human cancers. Mutation or  
 CC dysregulation of the telomerase repression pathway may cause reactivation  
 CC or upregulation of telomerase expression in cancer. Substances,  
 CC identified in the methods, can be used to block transcription from the TR  
 CC gene promoter through interaction of the 5' regulatory sequences. These  
 CC substances, e.g. antisense oligonucleotides, transcription factors, are  
 CC peptide nucleic acids and factors that disrupt signal transduction, are  
 CC useful for cancer therapy. In particular, gene therapy vectors  
 CC (especially pGF62-codAupp) comprising the promoter and a viral thymidine  
 CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that  
 CC neoplasia can be controlled or treated. Direct down-regulation of  
 CC telomerase RNA gene through manipulation of transcription factors may be  
 CC effective anticancer therapy and the cloning of the hTR gene promoter  
 CC allows the analysis of therapeutic molecules which modulate hTR promoter  
 CC activity. Sequences AAZ07696-321 represent PCR primers used in cloning  
 CC and mutagenesis of human TR gene (hTR) promoter region  
 XX  
 SQ Sequence 25 BP; 1 A; 5 C; 15 G; 4 T; 0 U; 0 Other;  
 Query Match 2.8%; Score 12.8; DB 1; Length 25;  
 Best Local Similarity 70.8%; Pred. No. 5.3e+02;  
 Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;  
 QY 223 CGCTGCGCCGAGCCGCCGCAACCCG 246  
 DB 25 CCCAGGCCCCACCTCCGCAACCCG 2  
 RESULT 482  
 AAV41169  
 ID AAV41169 standard; DNA; 30 BP.  
 XX  
 AC AAV41169;  
 XX  
 DT 08-OCT-1998 (first entry)  
 XX  
 DE RNA component of human telomerase (hTR) antisense oligo 14.  
 XX  
 KW RNA component; human telomerase; antisense oligonucleotide; infection;  
 KW neuroblastoma; bladder cancer; colon cancer; prostate cancer; cancer;  
 KW contraception; sterilisation; immunosuppression; therapeutic; hTR;  
 KW immune system down-regulation; anti-inflammatory therapy; ss.  
 XX  
 OS Synthetic.  
 OS Homo sapiens.  
 XX  
 PN WO9828442-A1.  
 XX  
 PD 02-JUL-1998.  
 XX  
 PF 19-DEC-1997; 97WO-US023619.  
 XX  
 PR 20-DEC-1996; 96US-00770564.  
 XX  
 PR 20-DEC-1996; 96US-00770565.  
 XX  
 PA (GERO-) GERON CORP.  
 XX  
 PI Kim NW, Wu F, Kealey JT, Pruzan R, Weinrich SL;  
 XX WPI; 1998-377670/32.

XX New polynucleotide(s) anti-sense to human telomerase - used for detecting  
PT or inhibiting human telomerase, e.g. for treating cancers, contraception,  
PT immuno-suppression or treating infection.  
XX  
XX Claim 11; Page 65; 80pp; English.  
XX  
XX Sequences shown in AAV41169 to AAV41181 represent antisense  
CC oligonucleotides to the RNA component of human telomerase (hTR). These  
CC antisense oligonucleotides specifically hybridise to a nucleotide  
CC sequence within an accessible region of the hTR, but that does not  
CC hybridise to a sequence within the template region of hTR. These  
CC oligonucleotides may specifically be used for detection of an RNA  
CC component of human telomerase in a sample. This is useful for diagnosing  
CC cancer (especially neuroblastoma, bladder, colon and prostate cancer),  
CC and providing prognosis for a cancer patient. The inhibitory  
CC oligonucleotides can inhibit the telomerase activity level in a cell by  
CC interfering with transcription of the RNA component, decreasing the half-  
CC life of the telomerase RNA component transcript, inhibiting assembly of  
CC the RNA component into the telomerase holoenzyme, or inhibiting the  
CC polymerase activity of telomerase. These antisense oligonucleotides can  
CC be used for inhibiting telomerase activity in both cultured cells and in  
CC cells in vivo. They can be used in therapeutics for treating or  
CC preventing cancer, for contraception or sterilisation, for  
CC immunosuppression, and for selectively down-regulating specific branches  
CC of the immune system, e.g. a specific subset of T-cells, in anti-  
CC inflammatory therapies or for treating infections by, e.g. yeast,  
CC parasites or fungi  
XX  
XX Sequence 30 BP; 4 A; 10 C; 8 G; 8 T; 0 U; 0 Other;  
SQ  
Query Match 2.8%; Score 12.8; DB 1; Length 30;  
Best Local Similarity 70.8%; Pred. No. 5.4e+02;  
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;  
Qy 131 CCTCGGCTGCGGCTTCCACCGT 154  
Db ||||| ||||| ||||| |||||  
5 CCTCTCTCGGCGCTGAACCGT 28  
RESULT 483  
AAZ07298/C  
ID AAZ07298 standard; DNA; 38 BP.  
XX  
XX AAZ07298;  
XX  
XX 22-OCT-1999 (first entry)  
XX  
XX Human telomerase RNA gene (hTR) promoter specific primer h112.  
XX  
XX Telomerase RNA; TR; promoter; cytotoxin; cancer; neoplasia; hTR;  
XX gene therapy; thymidine kinase gene; anticancer therapy; human;  
XX mutagenesis; PCR primer; ss.  
XX  
XX Synthetic.  
XX OS Homo sapiens.  
XX  
XX WO9938964-A2.  
XX  
XX 05-AUG-1999.  
XX  
XX 29-JAN-1999; 99WO-GB000308.  
XX  
XX 29-JAN-1998; 98GB-00001902.  
XX  
XX (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.  
XX  
XX Keith WN;  
XX  
XX WPI; 1999-479183/40.  
XX  
XX Mouse and human telomerase RNA gene promoters, useful for tumor specific  
PT gene therapy.

XX Disclosure; Fig 12; 109pp; English.  
XX  
XX The invention relates to promoter regions from mouse and human telomerase  
CC RNA (TR) component genes. The TR gene promoter can be linked to a  
CC heterologous gene, especially a gene encoding a cytotoxin, for therapy of  
CC cancer, especially neoplasias. The telomerase is necessary for the  
CC unrestricted proliferative capacity of many human cancers. Mutation or  
CC dysregulation of the telomerase repression pathway may cause reactivation  
CC or upregulation of telomerase expression in cancer. Substances,  
CC identified in the methods, can be used to block transcription from the TR  
CC gene promoter through interaction of the 5' regulatory sequences. These  
CC substances, e.g. antisense oligonucleotides, transcription factors, are  
CC peptide nucleic acids and factors that disrupt signal transduction, are  
CC useful for cancer therapy. In particular, gene therapy vectors  
CC (especially pGT62-codrupp) comprising the promoter and a viral thymidine  
CC kinase gene can be used to convert a prodrug, e.g. gancyclovir, so that  
CC neoplasia can be controlled or treated. Direct down-regulation of  
CC telomerase RNA gene through manipulation of transcription factors may be  
CC effective anticancer therapy and the cloning of the hTR gene promoter  
CC allows the analysis of therapeutic molecules which modulate hTR promoter  
CC activity. Sequences AAZ07696-321 represent PCR primers used in cloning  
CC and mutagenesis of human TR gene (hTR) promoter region  
XX  
XX Sequence 38 BP; 3 A; 7 C; 21 G; 7 T; 0 U; 0 Other;  
SQ  
Query Match 2.8%; Score 12.8; DB 1; Length 38;  
Best Local Similarity 70.8%; Pred. No. 5e+02;  
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;  
Qy 223 CGCTGCCGAGCCCCGGAACCCG 246  
Db ||||| ||||| ||||| |||||  
25 CCCAGGCCACCCCTCCGCAACCCG 2  
RESULT 484  
AAU08205  
ID AAU08205 standard; DNA; 62 BP.  
XX  
XX AAU08205;  
XX  
XX 28-JUN-2000 (first entry)  
XX  
XX Adenovirus nucleotide sequence SEQ ID NO:20.  
XX  
XX Human; telomerase; hTR; telomeric repeat amplification protocol; TRAP;  
XX identification; detection; quantification; cancer; metastasis; ss.  
XX  
XX Mastadenovirus.  
XX  
XX US6037126-A.  
XX  
XX 14-MAR-2000.  
XX  
XX 12-JUN-1997; 97US-00873709.  
XX  
XX 12-JUN-1997; 97US-00873709.  
XX  
XX (INVI-) INVITRO DIAGNOSTICS INC.  
XX  
XX Grossman A;  
XX  
XX WPI; 2000-282223/24.  
XX  
XX Pair of RNA molecules for detecting telomerase, useful for diagnosis of  
XX cancer or metastases, can be ligated when bound to telomerase subunit  
XX protein.  
XX  
XX Example 2; Col 23; 32pp; English.  
XX  
XX The present invention describes a pair of RNA molecules (R1, R2) for  
XX detecting a first subunit protein (I) of telomerase. R1 and R2 both bind  
XX to (I) and have formulae 5'-A-B-C-3' (R1) 5'-D-E-F-3' (R2) where: A and F

CC = RNA segment of 10 to 100000 nucleotides (nt) that together are replicated by RNA replicase; B and E = RNA segments of 10 to 250 nt from the Y region of human telomerase and bind specifically to (1); C and D = RNA segments of 1 to 10000 nt which can be ligated together. Ligation of C and D produces R3 of formula 5'-A-B-C-D-E-F-3' (R3) with E and B bound to (1). Replication of R3 by RNA replicase indicates presence of (1). Also described are: (1) method for detecting (1) using R1 and R2; (2) kit for this process containing R1, R2, ligase and an amplification system; and (3) method for making R1 and R2 by transcription from appropriate DNA. R1 and R2 are used to detect and quantify telomerase, particularly for diagnosis of cancer and for detection of metastases. R1 and R2 provide an assay that does not require expensive equipment or highly trained personnel, and is suitable for automation. The present sequence represents an oligonucleotide used in the exemplification of the present invention

XX Sequence 62 BP; 16 A; 27 C; 10 G; 9 T; 0 U; 0 Other;  
SQ Query Match 2.8%; Score 12.8; DB 1; Length 62;  
Best Local Similarity 70.8%; Pred. No. 3.2e+02;  
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

OY 222 TCGCCTGCCAGCCCGCAACCC 245  
||| ||||| ||||| |||||  
Db 38 TCCGAGGCCACCTCCGCAACCC 61

RESULT 485  
AAH24816  
ID AAH24816 standard; RNA; 62 BP.  
XX  
AC AAH24816;  
XX  
DT 06-AUG-2001 (first entry)  
XX Human nucleic acid sequence derived from Y-1 domain of telomerase.  
DE  
XX  
KW RNA-binding protein; RBP; RNA replicase; RNA identification; telomerase;  
KW ss.  
OS Homo sapiens.  
XX  
PN US6238867-B1.  
XX  
PD 29-MAY-2001.  
XX  
PF 22-FEB-1999; 99US-00255464.  
XX  
PR 23-FEB-1998; 98US-0075495P.  
XX  
PA (INVI-) INVITRO DIAGNOSTICS INC.  
XX

PI Roninson IB, Grossman A;  
XX  
DR WPI; 2001-366472/38.  
XX  
XX New ribonucleic acids useful for identifying naturally occurring RNA  
PT sequences having affinity for RNA-binding protein having protein and RNA  
PT components.  
XX  
XX Example 2; Col 26; 36pp; English.

XX The specification describes a first RNA (RNA1) and a second RNA (RNA2)  
CC for use in binding an RNA-binding protein (RBP) having protein and RNA  
CC components. RNA1 has the formula 5'-A-B-C-3', where A is section having  
CC 10-100,000 nucleotides and is can be received by an RNA replicase and  
CC with another DNA sequence, F, being replicated; B is section having 10-  
CC 3,000 nucleotides which have affinity to one consensus sequence of the  
CC RBP and which can bind to the protein component; C is section having  
CC about 1-20 nucleotides and which can be ligated to D of the second RNA  
CC molecule. RNA2 has the formula 5'-B-E-F-3', where D is section having 1-  
CC 20 nucleotides and which can be ligated to C; E is section 10-3,000  
CC nucleotides which have affinity to second consensus sequence of the RBP

CC and which can bind to the protein component; F is section having 10-  
CC 100,000 nucleotides which can be received by an RNA replicase and with A  
CC being replicated. RNA1 and RNA2 are capable of forming a third RNA (RNA3)  
CC of formula 5'-A-B-C-D-E-F-3'. The method is useful for the identification  
CC and characterization of RNA sequences having specific affinity to amino  
CC acid consensus sequences of RBPs, and to RNAs. AAH24815-16 were used to  
CC produce a double-stranded RNA1, comprising the Y-1 domain of human  
CC telomerase

XX Sequence 62 BP; 16 A; 27 C; 10 G; 9 T; 0 U; 0 Other;

Query Match 2.8%; Score 12.8; DB 1; Length 62;  
Best Local Similarity 70.8%; Pred. No. 3.2e+02;  
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

OY 222 TCGCCTGCCAGCCCGCAACCC 245  
||| ||||| ||||| |||||  
Db 38 TCCGAGGCCACCTCCGCAACCC 61

RESULT 486  
AAH08204/C  
ID AAA08204 standard; DNA; 66 BP.  
XX  
AC AAA08204;  
XX  
DT 28-JUN-2000 (first entry)  
XX  
DE Adenovirus nucleotide sequence SEQ ID NO:19.  
XX Human; telomerase; hTR; telomeric repeat amplification protocol; TRAP;  
KW identification; detection; quantification; cancer; metastasis; ss.  
XX Mastadenovirus.  
XX  
PN US6037126-A.  
XX  
PD 14-MAR-2000.  
XX  
PF 12-JUN-1997; 97US-00873709.  
XX  
PR 12-JUN-1997; 97US-00873709.  
XX  
PA (INVI-) INVITRO DIAGNOSTICS INC.  
XX Grossman A;  
XX  
DR WPI; 2000-282223/24.  
XX

PT Pair of RNA molecules for detecting telomerase, useful for diagnosis of  
PT cancer or metastases, can be ligated when bound to telomerase subunit  
PT protein.

PS Example 2; Col 23; 32pp; English.

XX The present invention describes a pair of RNA molecules (R1, R2) for  
CC detecting a first subunit protein (1) of telomerase. R1 and R2 both bind  
CC to (1) and have formulae 5'-A-B-C-3', (R1) 5'-D-E-F-3', (R2) where: A and F  
CC = RNA segment of 10 to 100000 nucleotides (nt) that together are  
CC replicated by RNA replicase; B and E = RNA segments of 10 to 250 nt from  
CC the Y region of human telomerase and bind specifically to (1); C and D =  
CC RNA segments of 1 to 10000 nt which can be ligated together. Ligation of  
CC C and D produces R3 of formula 5'-A-B-C-D-E-F-3' (R3) with E and B bound  
CC to (1). Replication of R3 by RNA replicase indicates presence of (1).  
CC Also described are: (1) method for detecting (1) using R1 and R2; (2) kit  
CC for this process containing R1, R2, ligase and an amplification system;  
CC and (3) method for making R1 and R2 by transcription from appropriate  
CC DNA. R1 and R2 are used to detect and quantify telomerase, particularly  
CC for diagnosis of cancer and for detection of metastases. R1 and R2  
CC provide an assay that does not require expensive equipment or highly  
CC trained personnel, and is suitable for automation. The present sequence  
CC represents an oligonucleotide used in the exemplification of the present  
CC invention

```
XX SQ Sequence 66 BP; 10 A; 11 C; 28 G; 17 T; 0 U; 0 Other;
Query Match 2.8%; Score 12.8; DB 1; Length 66;
Best Local Similarity 70.8%; Pred. No. 3e+02;
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

Oy 222 TCGCCTGCCAGCCCGAACCC 245
Db 29 TCCAGGCCACCCCTCGCAACC 6

RESULT 487
AAH24815/C
ID AAH24815 standard; RNA; 66 BP.
XX AC AAH24815;
XX DT 06-AUG-2001 (first entry)
XX DE Human nucleic acid sequence derived from Y-1 domain of telomerase.
XX DE RNA-binding protein; RBP; RNA replicase; RNA identification; telomerase;
XX KW ss.
XX OS Homo sapiens.
XX PN US6238867-B1.
XX PD 29-MAY-2001.
XX PF 22-FEB-1999; 99US-00255464.
XX PR 23-FEB-1998; 98US-0075495P.
XX PA (INV-) INVITRO DIAGNOSTICS INC.
XX PI Roninsson IB, Grossman A;
XX WPI; 2001-366472/38.
XX PT New ribonucleic acids useful for identifying naturally occurring RNA
XX PT sequences having affinity for RNA-binding protein having protein and RNA
XX PS components.
XX PS Example 2; Col 26; 36pp; English.
XX CC The specification describes a first RNA (RNA1) and a second RNA (RNA2)
XX CC for use in binding an RNA-binding protein (RBP) having protein and RNA
XX CC components. RNA1 has the formula 5'-A-B-C-3', where A is section having
XX CC 10-100,000 nucleotides and is can be received by an RNA replicase and
XX CC with another DNA sequence, F, being replicated; B is section having 10-
XX CC 3,000 nucleotides which have affinity to one consensus sequence of the
XX CC RBP and which can bind to the protein component; C is section having
XX CC about 1-20 nucleotides and which can be ligated to D of the second RNA
XX CC molecule. RNA2 has the formula 5'-D-E-F-3', where D is section having 1-
XX CC 20 nucleotides and which can be ligated to C; E is section 10-3,000
XX CC nucleotides which have affinity to second consensus sequence of the RBP
XX CC and which can bind to the protein component; F is section having 10-
XX CC 100,000 nucleotides which can be received by an RNA replicase and with A
XX CC being replicated. RNA1 and RNA2 are capable of forming a third RNA (RNA3)
XX CC of formula 5'A-B-C-D-E-F-3'. The method is useful for the identification
XX CC and characterization of RNA sequences having specific affinity to amino
XX CC acid consensus sequences of RBP, and to RNAs. AAH24815-16 were used to
XX CC produce a double-stranded RNA1, comprising the Y-1 domain of human
XX CC telomerase
XX SQ Sequence 66 BP; 10 A; 11 C; 28 G; 17 T; 0 U; 0 Other;
Query Match 2.8%; Score 12.8; DB 1; Length 66;
Best Local Similarity 70.8%; Pred. No. 3e+02;
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

Oy 222 TCGCCTGCCAGCCCGAACCC 245
Db 29 TCCAGGCCACCCCTCGCAACC 6

RESULT 488
ADG98448/C
ID ADG98448 standard; DNA; 15 BP.
XX AC ADG98448;
XX DT 11-MAR-2004 (first entry)
XX DE Human CERP gene allele specific oligonucleotide PCR primer #21.
XX DE human; cholesterol ester transfer protein; CERP;
XX KW single nucleotide polymorphism; SNP; drug screening; atherosclerosis;
XX KW cardiovascular disease; hypercholesterolaemia;
XX KW allele specific oligonucleotide; ss; PCR; primer.
XX OS Homo sapiens.
XX PN WO2003091277-A2.
XX PD 06-NOV-2003.
XX PF 28-APR-2003; 2003WO-US013288.
XX PR 26-APR-2002; 2002US-0375791P.
XX PA (GENA-) GENAISSANCE PHARM INC.
XX PI Anastasio AE, Chew A, Kazemi A, Lachowicz M, Lee HH, Parks KE;
XX PI Petersen N, Rounds E, Sausker EA, Tirrell C;
XX WPI; 2003-865576/80.
XX PT New isolated polynucleotide useful for haplotyping and/or genotyping
XX PT cholesterol ester transfer protein (CERP) gene in an individual or in
XX PT screening for drugs useful in treating diseases associated with CERP
XX PS activity.
XX PS Claim 43; SEQ ID NO 80; 250pp; English.
XX CC The invention comprises the amino acid and coding sequences of the human
XX CC cholesterol ester transfer protein (CERP), the invention also comprises
XX CC polymorphisms identified within the CERP gene. The DNA and protein
XX CC sequences of the invention are useful in haplotyping and/or genotyping
XX CC the CERP gene in an individual. The DNA and protein sequences may also be
XX CC used to screen drugs or compounds targeting the CERP or its variant to
XX CC treat a condition or disease associated with CERP (e.g. atherosclerosis,
XX CC cardiovascular disease or hypercholesterolaemia). The present DNA
XX CC sequence represents an allele specific oligonucleotide PCR primer for the
XX CC human CERP gene.
XX SQ Sequence 15 BP; 0 A; 2 C; 10 G; 2 T; 0 U; 1 Other;
Query Match 2.8%; Score 12.6; DB 1; Length 15;
Best Local Similarity 92.3%; Pred. No. 3.6e+02;
Matches 12; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Oy 226 CTGCCAGCCGCC 238
Db 15 CYGCCAGCCGCC 3

Search completed: August 24, 2005, 14:24:50
Job time : 5 secs
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```
- SWOVL3CAN12H12
Seq primer: -40ml3 fwd. ET from Amersham
High quality sequence stop: 1.
Location/Qualifiers
1. .19
/organism="Onchocerca volvulus"
/mol_type="mRNA"
/strain="Sierra Leone"
/db_xref="taxon:6282"
/clone="onche72"
/lab_host="XLI-Blue MRF"
/clone_lib="Onchocerca volvulus infective larva cDNA
(SAW94WL-Ovt3)"
/note="Vector: lambda UniZap XR; Site 1: EcoR I; Site 2:
Xho I; Cutaneous filarial nematode parasite of humans.
mRNA was prepared from third stage infective larvae of
Onchocerca volvulus isolated from mosquitoes 10 days after
infection and converted to double stranded cDNA using
reverse transcriptase and oligo(dT) followed by RNase H
and DNase I. The library had 1.8 x 10E5 independent
recombinants and average insert size was 900 base pairs.
The library was constructed by Wenhong Lu. The library is
available from Dr. S.A. Williams, email genome@smith.edu."
```

Query Match 2.0%; Score 8.8; DB 1; Length 19;  
Best Local Similarity 83.3%; Pred. No. 0;  
Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 36 CATTTCCTCT 47  
| | | | | | | |  
Db 17 CTTTTCCTCT 6

Search completed: August 24, 2005, 14:51:46  
Job time : 0.001 secs



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OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 14:28:58 ; Search time 1 Seconds  
(without alignments)  
4.890 Million cell updates/sec

Title: US-09-436-060A-16

Perfect score: 451

Sequence: 1 99gtgggggggtggcct.....aggactgggtcacatgc 451

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 0.5

Searched: 252 seqs, 5421 residues

Total number of hits satisfying chosen parameters: 504

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 257 summaries

Database : rni.subdb.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

†

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
C 1	54	12.0	62	1	US-08-873-709-20
C 2	54	12.0	62	1	US-09-255-464B-16
C 3	54	12.0	66	1	US-08-873-709-19
4	54	12.0	66	1	US-09-255-464B-15
5	31	6.9	31	1	US-08-838-545-49
6	31	6.9	31	1	US-09-349-532-49
C 7	31	6.9	31	1	US-09-717-828B-1
C 8	31	6.9	31	1	US-09-717-829A-1
C 9	31	6.9	31	1	US-10-330-872-1
C 10	30	6.7	30	1	US-08-330-123A-22
C 11	30	6.7	30	1	US-08-482-115B-22
C 12	30	6.7	30	1	US-08-660-678A-22
C 13	30	6.7	30	1	US-08-770-565-5
C 14	30	6.7	30	1	US-08-770-565-8
C 15	30	6.7	30	1	US-08-485-778-18
C 16	30	6.7	30	1	US-08-472-802C-23
C 17	30	6.7	30	1	US-08-520-550A-18
C 18	30	6.7	30	1	US-08-998-443-22
C 19	30	6.7	30	1	US-09-060-523-22
C 20	30	6.7	30	1	US-09-580-517-22
C 21	30	6.7	30	1	US-09-717-828B-4
C 22	30	6.7	30	1	US-09-717-829A-5
C 23	30	6.7	30	1	US-09-717-829A-5
C 24	30	6.7	30	1	US-09-057-351-22
C 25	30	6.7	30	1	US-09-903-461-2
C 26	30	6.7	30	1	US-10-330-872-4
C 27	30	6.7	30	1	US-10-330-872-5
C 28	30	6.4	30	1	US-08-833-377-2
C 29	29	6.4	30	1	US-08-833-377-5
C 30	29	6.4	30	1	US-08-833-377-6
C 31	29	6.4	30	1	US-08-833-377-6
C 32	28.4	6.3	30	1	US-09-717-828B-3
C 33	28.4	6.3	30	1	US-09-717-829A-3

1	US-10-330-872-3	30	6.3	28.4	C 34	Sequence 3, Appll
28	US-09-286-959B-3	28	6.2	27.4	C 35	Sequence 3, Appll
1	US-08-833-377-4	30	6.1	27	C 36	Sequence 4, Appll
27	US-08-770-565-26	27	6.0	27	C 37	Sequence 26, Appll
1	US-08-974-180-32	27	6.0	27	C 38	Sequence 32, Appll
28	US-08-482-115B-31	28	5.9	26.4	C 39	Sequence 31, Appll
1	US-08-482-115B-40	28	5.9	26.4	C 40	Sequence 40, Appll
28	US-08-472-802C-38	28	5.9	26.4	C 41	Sequence 38, Appll
1	US-08-330-123A-23	26	5.8	26	C 42	Sequence 23, Appll
26	US-08-482-115B-23	26	5.8	26	C 43	Sequence 23, Appll
26	US-08-482-115B-29	26	5.8	26	C 44	Sequence 29, Appll
26	US-08-660-678A-23	26	5.8	26	C 45	Sequence 23, Appll
26	US-08-770-565-25	26	5.8	26	C 46	Sequence 25, Appll
26	US-08-710-249-25	26	5.8	26	C 47	Sequence 25, Appll
26	US-08-710-249-26	26	5.8	26	C 48	Sequence 26, Appll
26	US-08-485-778-19	26	5.8	26	C 49	Sequence 19, Appll
26	US-08-472-802C-24	26	5.8	26	C 50	Sequence 24, Appll
26	US-08-472-802C-30	26	5.8	26	C 51	Sequence 30, Appll
26	US-08-520-550A-19	26	5.8	26	C 52	Sequence 19, Appll
26	US-08-974-180-33	26	5.8	26	C 53	Sequence 33, Appll
26	US-08-998-443-23	26	5.8	26	C 54	Sequence 23, Appll
26	US-08-974-549A-597	26	5.8	26	C 55	Sequence 597, App
26	US-08-974-549A-598	26	5.8	26	C 56	Sequence 598, App
26	US-09-060-523-23	26	5.8	26	C 57	Sequence 23, Appll
26	US-09-220-157A-25	26	5.8	26	C 58	Sequence 25, Appll
26	US-09-220-157A-26	26	5.8	26	C 59	Sequence 26, Appll
26	US-09-286-959B-4	26	5.8	26	C 60	Sequence 4, Appll
26	US-09-580-517-23	26	5.8	26	C 61	Sequence 23, Appll
26	US-08-912-951-311	26	5.8	26	C 62	Sequence 311, App
26	US-08-912-951-312	26	5.8	26	C 63	Sequence 312, App
26	US-09-057-351-23	26	5.8	26	C 64	Sequence 23, Appll
26	US-09-057-351-30	26	5.8	26	C 65	Sequence 30, Appll
26	US-09-653-573-4	26	5.8	26	C 66	Sequence 4, Appll
26	US-09-653-573-5	26	5.8	26	C 67	Sequence 5, Appll
26	US-09-402-181B-597	26	5.8	26	C 68	Sequence 597, App
26	US-09-402-181B-598	26	5.8	26	C 69	Sequence 598, App
26	US-09-721-456-597	26	5.8	26	C 70	Sequence 597, App
26	US-09-721-456-598	26	5.8	26	C 71	Sequence 598, App
26	US-08-630-019A-26	25	5.5	25	C 72	Sequence 26, Appll
25	US-08-630-019A-36	25	5.5	25	C 73	Sequence 36, Appll
25	US-08-838-545-40	25	5.5	25	C 74	Sequence 40, Appll
25	US-09-349-532-40	25	5.5	25	C 75	Sequence 40, Appll
25	US-08-482-115B-28	25	5.5	25	C 76	Sequence 28, Appll
25	US-08-472-802C-29	25	5.5	25	C 77	Sequence 29, Appll
25	US-09-057-351-29	25	5.5	25	C 78	Sequence 29, Appll
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24	US-08-838-545-25	24	5.3	24	C 80	Sequence 25, Appll
24	US-09-349-532-25	24	5.3	24	C 81	Sequence 25, Appll
24	US-09-018-125-4	24	5.3	24	C 82	Sequence 4, Appll
24	US-09-018-125-5	24	5.3	24	C 83	Sequence 5, Appll
23	US-08-838-545-26	23	5.1	23	C 84	Sequence 26, Appll
23	US-09-349-532-26	23	5.1	23	C 85	Sequence 26, Appll
23	US-08-485-778-20	23	5.1	23	C 86	Sequence 20, Appll
23	US-08-520-550A-20	23	5.1	23	C 87	Sequence 20, Appll
22	US-08-330-123A-5	22	4.9	22	C 88	Sequence 5, Appll
22	US-08-482-115B-32	22	4.9	22	C 89	Sequence 32, Appll
22	US-08-660-678A-27	22	4.9	22	C 90	Sequence 27, Appll
22	US-08-660-678A-28	22	4.9	22	C 91	Sequence 28, Appll
22	US-08-485-778-7	22	4.9	22	C 92	Sequence 7, Appll
22	US-08-485-778-8	22	4.9	22	C 93	Sequence 8, Appll
22	US-08-472-802C-37	22	4.9	22	C 94	Sequence 37, Appll
22	US-08-472-802C-42	22	4.9	22	C 95	Sequence 42, Appll
22	US-08-472-802C-43	22	4.9	22	C 96	Sequence 43, Appll
22	US-08-520-550A-7	22	4.9	22	C 97	Sequence 7, Appll
22	US-08-520-550A-8	22	4.9	22	C 98	Sequence 8, Appll
22	US-08-998-443-27	22	4.9	22	C 99	Sequence 27, Appll
22	US-08-998-443-28	22	4.9	22	C 100	Sequence 28, Appll
22	US-09-580-517-5	22	4.9	22	C 101	Sequence 5, Appll
22	US-09-580-517-6	22	4.9	22	C 102	Sequence 6, Appll
22	US-09-717-828B-2	22	4.9	22	C 103	Sequence 2, Appll
22	US-09-717-829A-2	22	4.9	22	C 104	Sequence 2, Appll
22	US-09-057-351-41	22	4.9	22	C 105	Sequence 41, Appll
22	US-09-057-351-41	22	4.9	22	C 106	Sequence 41, Appll

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c 108	22	4.9	22	1	US-10-330-872-2	Sequence 2, Appli	c 181	14	3.1	14	1	US-08-630-019A-25	Sequence 25, Appl
c 109	22	4.7	25	21	US-08-330-123A-25	Sequence 25, Appl	182	13.8	3.1	17	1	US-08-158-352-2	Sequence 2, Appli
c 110	21	4.7	21	1	US-08-482-115B-25	Sequence 25, Appl	183	13.8	3.1	17	1	US-09-108-911-2	Sequence 2, Appli
c 111	21	4.7	21	1	US-08-660-678A-25	Sequence 25, Appl	184	13.8	3.1	17	1	US-08-679-645-826	Sequence 826, App
c 112	21	4.7	21	1	US-08-485-778-33	Sequence 33, Appl	185	13.8	3.1	18	1	US-08-679-645-571	Sequence 571, App
c 113	21	4.7	21	1	US-08-472-802C-26	Sequence 26, Appl	186	13.4	3.0	17	1	US-09-586-376-11	Sequence 11, Appl
c 114	21	4.7	21	1	US-08-520-550A-33	Sequence 33, Appl	187	13.4	3.0	17	1	US-09-586-376-12	Sequence 12, Appl
c 115	21	4.7	21	1	US-08-998-443-25	Sequence 25, Appl	188	13.4	3.0	17	1	US-09-371-772B-4559	Sequence 4559, Ap
c 116	21	4.7	21	1	US-09-060-523-25	Sequence 25, Appl	189	13.4	3.0	17	1	US-10-232-634-11	Sequence 11, Appl
c 117	21	4.7	21	1	US-09-580-517-25	Sequence 25, Appl	190	13.4	3.0	17	1	US-10-232-634-12	Sequence 12, Appl
c 118	21	4.7	21	1	US-09-057-351-25	Sequence 25, Appl	c 191	13	2.9	13	1	US-08-630-019A-11	Sequence 11, Appl
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c 132	20	4.4	20	1	US-08-472-802C-8	Sequence 8, Appli	c 205	13	2.9	13	1	US-09-349-532-12	Sequence 12, Appl
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c 142	20	4.4	20	1	US-09-060-523-7	Sequence 7, Appli	c 215	13	2.9	16	1	US-08-301-435-34	Sequence 34, Appl
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c 147	20	4.4	20	1	US-09-057-351-40	Sequence 40, Appl	c 220	12.8	2.8	62	1	US-08-873-709-20	Sequence 20, Appl
c 148	19	4.2	19	1	US-08-770-565-9	Sequence 9, Appli	c 221	12.8	2.8	62	1	US-09-255-464B-16	Sequence 16, Appl
c 149	19	4.2	19	1	US-08-838-545-60	Sequence 60, Appl	c 222	12.8	2.8	66	1	US-08-873-709-19	Sequence 19, Appl
c 150	19	4.2	19	1	US-09-349-532-60	Sequence 60, Appl	c 223	12.8	2.8	66	1	US-09-255-464B-15	Sequence 15, Appl
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c 152	19	4.2	20	1	US-08-833-127-14	Sequence 14, Appl	c 225	12.4	2.7	16	1	US-09-328-174A-38	Sequence 38, Appl
c 153	18	4.0	18	1	US-08-838-545-9	Sequence 9, Appli	c 226	12	2.7	12	1	US-08-770-565-4	Sequence 4, Appli
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c 157	16.4	3.6	18	1	US-09-402-181B-543	Sequence 543, App	c 230	12	2.7	15	1	US-08-292-620A-396	Sequence 396, App
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c 159	16.2	3.6	21	1	US-08-026-143B-13	Sequence 13, Appl	c 232	12	2.7	15	1	US-09-071-845-396	Sequence 396, App
c 160	16.2	3.6	21	1	PCT-US92-10621-13	Sequence 13, Appl	c 233	12	2.7	15	1	US-09-071-845-591	Sequence 591, App
c 161	16.2	3.6	21	1	PCT-US94-02233-13	Sequence 13, Appl	c 234	12	2.7	15	1	US-09-081-646-720	Sequence 720, App
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c 163	16	3.5	16	1	US-09-349-532-27	Sequence 27, Appl	c 236	12	2.7	16	1	US-08-679-645-515	Sequence 515, App
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c 166	15	3.3	15	1	US-08-770-565-10	Sequence 10, Appl	c 239	11.8	2.6	15	1	US-08-484-551-1	Sequence 1, Appli
c 167	15	3.3	15	1	US-08-630-019A-12	Sequence 12, Appl	c 240	11.8	2.6	15	1	US-08-484-551-5	Sequence 5, Appli
c 168	15	3.3	15	1	US-08-630-019A-18	Sequence 18, Appl	c 241	11.8	2.6	15	1	US-08-486-963-18	Sequence 18, Appl
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c 170	15	3.3	15	1	US-08-838-545-2	Sequence 2, Appli	c 243	11.8	2.6	15	1	US-08-294-424-35	Sequence 35, Appl
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c 172	15	3.3	15	1	US-08-838-545-28	Sequence 28, Appl	c 245	11.8	2.6	15	1	US-08-470-887A-10	Sequence 10, Appl
c 173	15	3.3	15	1	US-08-838-545-45	Sequence 45, Appl	c 246	11.8	2.6	15	1	US-08-292-620A-292	Sequence 292, App
c 174	15	3.3	15	1	US-09-349-532-2	Sequence 2, Appli	c 247	11.8	2.6	15	1	US-08-316-439A-8	Sequence 8, Appli
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c 176	15	3.3	15	1	US-09-349-532-28	Sequence 28, Appl	c 249	11.8	2.6	15	1	US-08-173-489C-141	Sequence 141, App
c 177	15	3.3	15	1	US-09-349-532-45	Sequence 45, Appl	c 250	11.8	2.6	15	1	US-08-550-120-3	Sequence 3, Appli
c 178	14.8	3.3	18	1	US-09-673-298-4	Sequence 4, Appli	c 251	11.8	2.6	15	1	US-09-106-377-10	Sequence 10, Appl
c 179	14.8	3.3	19	1	US-08-392-818-22	Sequence 22, Appl	c 252	11.8	2.6	15	1	US-09-071-845-292	Sequence 292, App

253 11.8 2.6 15 1 US-08-871-732A-9 Sequence 9, Appli  
c 254 11.8 2.6 15 1 US-09-180-437-212 Sequence 212, App  
255 11.8 2.6 15 1 US-09-346-510B-9 Sequence 9, Appli  
256 11.8 2.6 15 1 US-09-544-934B-106 Sequence 106, App  
257 11.8 2.6 15 1 5166057-23 Patent No. 5166057

ALIGNMENTS

RESULT 1  
US-08-873-709-20/c  
; Sequence 20, Application US/08873709  
; Patent No. 6037126  
; GENERAL INFORMATION:  
; APPLICANT: Grossman, Abraham  
; TITLE OF INVENTION: COMPOSITIONS, METHODS, KITS AND  
; TITLE OF INVENTION: APPARATUS FOR DETERMINING THE PRESENCE OR ABSENCE OF  
; TITLE OF INVENTION: PROTEIN COMPONENT OF TELOMERASE ENZYME  
; NUMBER OF SEQUENCES: 25  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Abraham Grossman  
; STREET: 666 Washington Avenue  
; CITY: Pleasantville  
; STATE: NY  
; COUNTRY: USA  
; ZIP: 10570  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/873,709  
; FILING DATE: 12-JUN-1997  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Janiuk, Anthony J.  
; REGISTRATION NUMBER: 29,809  
; REFERENCE/DOCKET NUMBER: Q001/002  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 914-747-9108  
; INFORMATION FOR SEQ ID NO: 20:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 62 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
US-08-873-709-20

Query Match 12.0%; Score 54; DB 1; Length 62;  
Best Local Similarity 100.0%; Pred. No. 0.74; Mismatches 0; Indels 0; Gaps 0;  
Matches 54; Conservative 0;  
Qy 1 GGGTTGGAGGGTGGGCTGGAGGGGTGGTGGCCATTTTGTCTAACCCCTA 54  
Db 61 GGGTTGGAGGGTGGGCTGGAGGGGTGGTGGCCATTTTGTCTAACCCCTA 8

RESULT 2  
US-09-255-464B-16/c  
; Sequence 16, Application US/09255464B  
; Patent No. 6238867  
; GENERAL INFORMATION:  
; APPLICANT: Roninson, Igor  
; APPLICANT: Grossman, Abraham  
; TITLE OF INVENTION: Compositions, Methods, Kits and Apparatus for  
; TITLE OF INVENTION: Identifying Naturally Occurring RNA Sequences Having  
; TITLE OF INVENTION: Affinity for RNA-Binding Proteins  
; FILE REFERENCE: Q001/004a  
; CURRENT APPLICATION NUMBER: US/09/255.464B  
; CURRENT FILING DATE: 1999-02-22

; PRIOR APPLICATION NUMBER: 60/075,495  
; PRIOR FILING DATE: 1998-02-23  
; NUMBER OF SEQ ID NOS: 25  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 16  
; LENGTH: 62  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-09-255-464B-16

Query Match 12.0%; Score 54; DB 1; Length 62;  
Best Local Similarity 100.0%; Pred. No. 0.74; Mismatches 0; Indels 0; Gaps 0;  
Matches 54; Conservative 0;  
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Db 61 GGGTTGGAGGGTGGGCTGGAGGGGTGGTGGCCATTTTGTCTAACCCCTA 8

RESULT 3  
US-08-873-709-19  
; Sequence 19, Application US/08873709  
; Patent No. 6037126  
; GENERAL INFORMATION:  
; APPLICANT: Grossman, Abraham  
; TITLE OF INVENTION: COMPOSITIONS, METHODS, KITS AND  
; TITLE OF INVENTION: APPARATUS FOR DETERMINING THE PRESENCE OR ABSENCE OF  
; TITLE OF INVENTION: PROTEIN COMPONENT OF TELOMERASE ENZYME  
; NUMBER OF SEQUENCES: 25  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Abraham Grossman  
; STREET: 666 Washington Avenue  
; CITY: Pleasantville  
; STATE: NY  
; COUNTRY: USA  
; ZIP: 10570  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/873,709  
; FILING DATE: 12-JUN-1997  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Janiuk, Anthony J.  
; REGISTRATION NUMBER: 29,809  
; REFERENCE/DOCKET NUMBER: Q001/002  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 914-747-9108  
; INFORMATION FOR SEQ ID NO: 19:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 66 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
US-08-873-709-19

Query Match 12.0%; Score 54; DB 1; Length 66;  
Best Local Similarity 100.0%; Pred. No. 0.81; Mismatches 0; Indels 0; Gaps 0;  
Matches 54; Conservative 0;  
Qy 1 GGGTTGGAGGGTGGGCTGGAGGGGTGGTGGCCATTTTGTCTAACCCCTA 54  
Db 6 GGGTTGGAGGGTGGGCTGGAGGGGTGGTGGCCATTTTGTCTAACCCCTA 59  
..

RESULT 4  
US-09-255-464B-15  
; Sequence 15, Application US/09255464B  
; Patent No. 6238867

GENERAL INFORMATION:  
APPLICANT: Roninson, Igor  
TITLE OF INVENTION: Compositions, Methods, Kits and Apparatus for Identifying Naturally Occurring RNA Sequences Having Affinity for RNA-Binding Proteins  
FILE REFERENCE: Q001/004a  
CURRENT APPLICATION NUMBER: US/09/255.464B  
CURRENT FILING DATE: 1999-02-22  
PRIOR FILING DATE: 1998-02-23  
NUMBER OF SEQ ID NOS: 25  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 15  
LENGTH: 66  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-09-255-464B-15

Query Match 12.0%; Score 54; DB 1; Length 66;  
Best Local Similarity 100.0%; Pred. No. 0.81;  
Matches 54; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GGGTGGCGGGTGGCGCTGGGAGGGTGGTGGCCATTTTGTCTAACCCCTA 54  
Db 6 GGGTGGCGGGTGGCGCTGGGAGGGTGGTGGCCATTTTGTCTAACCCCTA 59

RESULT 5  
US-08-838-545-49  
Sequence 49, Application US/08838545  
Patent No. 6046307  
GENERAL INFORMATION:  
APPLICANT: Shay, Jerry W.  
APPLICANT: Wright, Woodring E.  
APPLICANT: Piatyszek, Mieczyslaw A.  
APPLICANT: Corey, David R.  
APPLICANT: No. 6046307ton, James C.  
TITLE OF INVENTION: Modulation of Mammalian Telomerase by Peptide Nucleic Acids  
NUMBER OF SEQUENCES: 60  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/838,545  
FILING DATE: 09-APR-1997  
CLASSIFICATION: 536  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/630,019  
FILING DATE: 09-APR-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-001610US  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 49:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 31 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear

MOLECULE TYPE: RNA (genomic)  
US-08-838-545-49

Query Match 6.9%; Score 31; DB 1; Length 31;  
Best Local Similarity 71.0%; Pred. No. 20;  
Matches 22; Conservative 9; Mismatches 0; Indels 0; Gaps 0;

Qy 40 TTTTGTCTAACCCCTAAGGAGGGCGGTAG 70  
Db 1 UUUUGCUAACCCUACUGAAGAGGGCGGUAG 31

RESULT 6  
US-09-349-532-49  
Sequence 49, Application US/09349532  
Patent No. 6294650  
GENERAL INFORMATION:  
APPLICANT: Shay, Jerry W.  
APPLICANT: Wright, Woodring E.  
APPLICANT: Piatyszek, Mieczyslaw A.  
APPLICANT: Corey, David R.  
APPLICANT: No. 6294650ton, James C.  
TITLE OF INVENTION: Modulation of Mammalian Telomerase by Peptide Nucleic Acids  
NUMBER OF SEQUENCES: 60  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/349,532  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/838,545  
FILING DATE: 09-APR-1997  
APPLICATION NUMBER: US 08/630,019  
FILING DATE: 09-APR-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-001610US  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 49:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 31 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: RNA (genomic)  
US-09-349-532-49

Query Match 6.9%; Score 31; DB 1; Length 31;  
Best Local Similarity 71.0%; Pred. No. 20;  
Matches 22; Conservative 9; Mismatches 0; Indels 0; Gaps 0;

Qy 40 TTTTGTCTAACCCCTAAGGAGGGCGGTAG 70  
Db 1 UUUUGCUAACCCUACUGAAGAGGGCGGUAG 31

RESULT 7  
US-09-717-828B-1/c

; Sequence 1, Application US/09717828B  
; Patent No. 6517834  
; GENERAL INFORMATION:  
; APPLICANT: Weinrich, Scott L  
; APPLICANT: Atkinson III, Edward M  
; APPLICANT: Lichtsteiner, Serge P  
; APPLICANT: Vasserot, Alain P  
; APPLICANT: Pruzan, Ronald A  
; TITLE OF INVENTION: A Method for Purifying Telomerase  
; FILE REFERENCE: PurifiedTelomerase011base  
; CURRENT APPLICATION NUMBER: US/09/717,828B  
; CURRENT FILING DATE: 2000-11-20  
; PRIOR APPLICATION NUMBER: 09/420,056  
; PRIOR FILING DATE: 1999-10-18  
; PRIOR APPLICATION NUMBER: 08/833,377  
; PRIOR FILING DATE: 1997-04-04  
; PRIOR APPLICATION NUMBER: 08/510,736  
; PRIOR FILING DATE: 1995-08-04  
; NUMBER OF SEQ ID NOS: 11  
; SOFTWARE: PatentIn Ver. 2.1 edited  
; SEQ ID NO 1  
; LENGTH: 31  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; NAME/KEY: misc\_feature  
; LOCATION: (1)  
; OTHER INFORMATION: Biotin 5'-terminal  
; NAME/KEY: misc\_feature  
; LOCATION: (31)  
; OTHER INFORMATION: Biotin 3'-terminal  
; OTHER INFORMATION: Description of Artificial Sequence: Affinity Agent  
US-09-717-828B-1

Query Match 6.9%; Score 31; DB 1; Length 31;  
Best Local Similarity 100.0%; Pred. No. 20;  
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGTCTAACCTAACTGAGAGGGCGTAGGC 72  
|||||  
Db 31 TTGTCTAACCTAACTGAGAGGGCGTAGGC 1

## RESULT 8

US-09-717-829A-1/c  
; Sequence 1, Application US/09717829A  
; Patent No. 6545133  
; GENERAL INFORMATION:  
; APPLICANT: Weinrich, Scott L  
; APPLICANT: Atkinson III, Edward M  
; APPLICANT: Lichtsteiner, Serge P  
; APPLICANT: Vasserot, Alain P  
; APPLICANT: Pruzan, Ronald A  
; TITLE OF INVENTION: A Method for Purifying Telomerase  
; FILE REFERENCE: PurifiedTelomerase011base  
; CURRENT APPLICATION NUMBER: US/09/717,829A  
; CURRENT FILING DATE: 2000-11-20  
; PRIOR APPLICATION NUMBER: 09/420,056  
; PRIOR FILING DATE: 1999-10-18  
; PRIOR APPLICATION NUMBER: 08/833,377  
; PRIOR FILING DATE: 1997-04-04  
; PRIOR APPLICATION NUMBER: 08/510,736  
; PRIOR FILING DATE: 1995-08-04  
; NUMBER OF SEQ ID NOS: 11  
; SOFTWARE: PatentIn Ver. 2.1 edited  
; SEQ ID NO 1  
; LENGTH: 31  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; NAME/KEY: misc\_feature  
; LOCATION: (1)  
; OTHER INFORMATION: Biotin 5'-terminal

; NAME/KEY: misc\_feature  
; LOCATION: (31)  
; OTHER INFORMATION: Biotin 3'-terminal  
; OTHER INFORMATION: Description of Artificial Sequence: Affinity Agent  
US-09-717-829A-1

Query Match 6.9%; Score 31; DB 1; Length 31;  
Best Local Similarity 100.0%; Pred. No. 20;  
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGTCTAACCTAACTGAGAGGGCGTAGGC 72  
|||||  
Db 31 TTGTCTAACCTAACTGAGAGGGCGTAGGC 1

## RESULT 9

US-10-330-872-1/c  
; Sequence 1, Application US/10330872  
; Patent No. 6787133  
; GENERAL INFORMATION:  
; APPLICANT: Geron Corporation  
; APPLICANT: Weinrich, Scott  
; APPLICANT: Atkinson III, Edward  
; APPLICANT: Lichtsteiner, Serge  
; APPLICANT: Vasserot, Alain  
; APPLICANT: Pruzan, Ronald  
; TITLE OF INVENTION: Using Purified Telomerase to Identify Telomerase Activators and  
; FILE REFERENCE: 011/006C  
; CURRENT APPLICATION NUMBER: US/10/330,872  
; CURRENT FILING DATE: 2002-12-24  
; PRIOR APPLICATION NUMBER: 08/510,736  
; PRIOR FILING DATE: 1995-08-04  
; PRIOR APPLICATION NUMBER: 08/833,377  
; PRIOR FILING DATE: 1997-04-04  
; PRIOR APPLICATION NUMBER: 09/420,056  
; PRIOR FILING DATE: 1999-10-18  
; PRIOR APPLICATION NUMBER: 09/717,828  
; PRIOR FILING DATE: 2000-11-20  
; NUMBER OF SEQ ID NOS: 11  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 1  
; LENGTH: 31  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-10-330-872-1

Query Match 6.9%; Score 31; DB 1; Length 31;  
Best Local Similarity 100.0%; Pred. No. 20;  
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGTCTAACCTAACTGAGAGGGCGTAGGC 72  
|||||  
Db 31 TTGTCTAACCTAACTGAGAGGGCGTAGGC 1

## RESULT 10

US-08-330-123A-22/c  
; Sequence 22, Application US/08330123A  
; Patent No. 5583016  
; GENERAL INFORMATION:  
; APPLICANT: VILLEPONTEAU, Bryant  
; APPLICANT: FENG, Junli  
; APPLICANT: FUNK, Walter  
; APPLICANT: ANDREWS, William H.  
; TITLE OF INVENTION: HUMAN TELOMERASE  
; NUMBER OF SEQUENCES: 25  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend Kourie and Crew  
; STREET: 379 Lytton Avenue  
; CITY: Palo Alto  
; STATE: California  
; COUNTRY: US

```
/
/ ZIP: 94301
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.25
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/330,123A
/ FILING DATE: 27-OCT-1994
/ CLASSIFICATION: 435
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/272,102
/ FILING DATE: 07-JUL-1994
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Smith, William M
/ REGISTRATION NUMBER: 30,223
/ REFERENCE/DOCKET NUMBER: 15389-000810
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 326-2400
/ TELEFAX: (415) 326-2422
/ INFORMATION FOR SEQ ID NO: 22:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 30 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA
US-08-330-123A-22

Query Match 6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 23;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 77 TGCCTTTGCTCCCGCGCGTGTTCCTC 106
Db 30 TGCCTTTGCTCCCGCGCGTGTTCCTC 1

RESULT 11
US-08-482-115B-22/c
/ Sequence 22, Application US/08482115B
/ Patent No. 576679
/ GENERAL INFORMATION:
/ APPLICANT: Villeponteau, Bryant
/ APPLICANT: Funk, Junli
/ APPLICANT: Funk, Walter
/ APPLICANT: Andrews, William H.
/ TITLE OF INVENTION: Assays for the RNA Component of Human
/ TITLE OF INVENTION: Telomerase
/ NUMBER OF SEQUENCES: 40
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Townsend and Townsend and Crew LLP
/ STREET: Two Embarcadero Center, Eighth Floor
/ CITY: San Francisco
/ STATE: California
/ COUNTRY: USA
/ ZIP: 94111-3834
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/482,115B
/ FILING DATE: 07-JUN-1995
/ CLASSIFICATION: 435
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/272,102
/ FILING DATE: 07-JUL-1994
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/330,123
/ FILING DATE: 27-OCT-1994
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Smith, William M
/ REGISTRATION NUMBER: 30,223
/ REFERENCE/DOCKET NUMBER: 15389-000810
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 326-2400
/ TELEFAX: (415) 326-2422
/ INFORMATION FOR SEQ ID NO: 22:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 30 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA
US-08-482-115B-22
```

```
/
/ NAME: Storella, John R.
/ REGISTRATION NUMBER: 32,944
/ REFERENCE/DOCKET NUMBER: 015389-000830US
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 576-0200
/ TELEFAX: (415) 576-0300
/ INFORMATION FOR SEQ ID NO: 22:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 30 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA
US-08-482-115B-22

Query Match 6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 23;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 77 TGCCTTTGCTCCCGCGCGTGTTCCTC 106
Db 30 TGCCTTTGCTCCCGCGCGTGTTCCTC 1

RESULT 12
US-08-660-678A-22/c
/ Sequence 22, Application US/08660678A
/ Patent No. 5837857
/ GENERAL INFORMATION:
/ APPLICANT: Villeponteau, Bryant
/ APPLICANT: Funk, Junli
/ APPLICANT: Funk, Walter
/ APPLICANT: Andrews, William H.
/ TITLE OF INVENTION: Mammalian Telomerase
/ NUMBER OF SEQUENCES: 30
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Townsend and Townsend and Crew LLP
/ STREET: Two Embarcadero Center, Eighth Floor
/ CITY: San Francisco
/ STATE: California
/ COUNTRY: USA
/ ZIP: 94111-3834
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/660,678A
/ FILING DATE: 05-JUN-1996
/ CLASSIFICATION: 435
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/330,123
/ FILING DATE: 27-OCT-1994
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/272,102
/ FILING DATE: 07-JUL-1994
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Storella, John R.
/ REGISTRATION NUMBER: 32,944
/ REFERENCE/DOCKET NUMBER: 015389-000811US
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 576-0200
/ TELEFAX: (415) 576-0300
/ INFORMATION FOR SEQ ID NO: 22:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 30 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA
US-08-660-678A-22
```

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Query Match      6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 23;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 77 TGCCTTTGCTCCCGCGCGCTGTTTCTC 106
Db 30 TGCCTTTGCTCCCGCGCGCTGTTTCTC 1

RESULT 13
US-08-770-565-5/c
; Sequence 5, Application US/08770565
; Patent No. 5846723
; GENERAL INFORMATION:
; APPLICANT: Kim, Nam Woo
; APPLICANT: Wu, Fred
; APPLICANT: Kealey, James T.
; APPLICANT: Pruzan, Ronald
; APPLICANT: Weinrich, Scott L.
; TITLE OF INVENTION: Methods for Detecting the RNA Component of
; TITLE OF INVENTION: Telomerase
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; FILING DATE: 20-DEC-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-002300US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-576-0200
; TELEFAX: 415-576-0300
; INFORMATION FOR SEQ ID NO: 8:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 30 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-08-770-565-5

Query Match      6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 23;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 137 CCTGCCGCTTCCACCGCTTCATTCTAGAGC 166
Db 30 CCTGCCGCTTCCACCGCTTCATTCTAGAGC 1

RESULT 15
US-08-485-778-18/c
; Sequence 18, Application US/08485778
; Patent No. 5876979
; GENERAL INFORMATION:
; APPLICANT: Andrews, William H.
; APPLICANT: Avilion, Ariel Athena
; APPLICANT: Peng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Greider, Carol
; APPLICANT: Marhuenda, Maria Antonia Blasco
; APPLICANT: Vilpenteau, Bryant
; TITLE OF INVENTION: RNA COMPONENT OF TELOMERASE
; NUMBER OF SEQUENCES: 45
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: MA
; COUNTRY: US
; ZIP: 02173
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; FILING DATE: 07-JE-1995

Query Match      6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 23;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 290 CTGCCACCGGAAGATTGGGCTGTGTCAG 319
Db 30 CTGCCACCGGAAGATTGGGCTGTGTCAG 1

RESULT 14
US-08-770-565-8/c
; Sequence 8, Application US/08770565
; Patent No. 5846723
; GENERAL INFORMATION:
; APPLICANT: Kim, Nam Woo
; APPLICANT: Wu, Fred
; APPLICANT: Kealey, James T.
; APPLICANT: Pruzan, Ronald
; APPLICANT: Weinrich, Scott L.
```

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; CLASSIFICATION: 435
; PRIOR APPLICATION DATA: US 08/387,524
; FILING DATE: 13-FEB-1995
; PRIOR APPLICATION DATA: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Granahan, Patricia
; REGISTRATION NUMBER: 32,227
; REFERENCE/DOCKET NUMBER: CSHL94-05A4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 30 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-485-778-18

Query Match 6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 23;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 77 TGCTTTTGCTCCCGCGCGTGTGTTTCTC 106
Db 30 TGCTTTTGCTCCCGCGCGTGTGTTTCTC 1

RESULT 16
US-08-472-802C-23/c
; Sequence 23, Application US/08472802C
; Patent No. 5958680
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 44
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/472,802C
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M.
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 15389-000820
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300

; INFORMATION FOR SEQ ID NO: 23:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 30 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-472-802C-23

Query Match 6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 23;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 77 TGCTTTTGCTCCCGCGCGTGTGTTTCTC 106
Db 30 TGCTTTTGCTCCCGCGCGTGTGTTTCTC 1

RESULT 17
US-08-520-550A-18/c
; Sequence 18, Application US/08520550A
; Patent No. 6013468
; GENERAL INFORMATION:
; APPLICANT: Andrews, William H.
; APPLICANT: Avillion, Ariel A.
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Greider, Carol
; APPLICANT: Marhuenda, Maria A. B.
; APPLICANT: Villeponteau, Bryant
; TITLE OF INVENTION: RNA Component of Telomerase
; NUMBER OF SEQUENCES: 47
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: MA
; COUNTRY: US
; ZIP: 02173
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,550A
; FILING DATE: 29-AUG-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/387,524
; FILING DATE: 13-FEB-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Granahan, Patricia
; REGISTRATION NUMBER: 32,227
; REFERENCE/DOCKET NUMBER: CSHL94-05A3B
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 30 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-520-550A-18

Query Match 6.7%; Score 30; DB 1; Length 30;

```







```
; LENGTH: 30
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)_feature
; OTHER INFORMATION: Biotin 5'-terminal
; OTHER INFORMATION: Description of Artificial Sequence: Affinity Agent
US-09-717-829A-4

Query Match          6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 23;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 167 AAACAAAATGTGAGCTGCTGGCCGCTTC 196
Db 30 AAACAAAATGTGAGCTGCTGGCCGCTTC 1

RESULT 24
US-09-717-829A-5/c
; Sequence 5, Application US/09717829A
; Patent No. 6545133
; GENERAL INFORMATION:
; APPLICANT: Weinrich, Scott L
; APPLICANT: Atkinson III, Edward M
; APPLICANT: Lichtsteiner, Serge P
; APPLICANT: Vasserot, Allain P
; APPLICANT: Pruzan, Ronald A
; TITLE OF INVENTION: A Method for Purifying Telomerase
; FILE REFERENCE: PurifiedTelomeraseOulbase
; CURRENT APPLICATION NUMBER: US/09/717,829A
; CURRENT FILING DATE: 2000-11-20
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 08/833,377
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 08/510,736
; PRIOR FILING DATE: 1995-08-04
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn Ver. 2.1 edited
; SEQ ID NO 5
; LENGTH: 30
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)_feature
; OTHER INFORMATION: Biotin 5'-terminal
; OTHER INFORMATION: Description of Artificial Sequence: Affinity Agent
US-09-717-829A-5

Query Match          6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 23;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 137 CCTGCGGCTTCCACCGTTCATTCTAGAGC 166
Db 30 CCTGCGGCTTCCACCGTTCATTCTAGAGC 1

RESULT 25
US-09-057-351-22/c
; Sequence 22, Application US/09057351
; Patent No. 6548298
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
```

```
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,802
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000821US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 30 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-057-351-22

Query Match          6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 23;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 77 TGCTTTTGCTCCCGCGCTGTTTTC 106
Db 30 TGCTTTTGCTCCCGCGCTGTTTTC 1

RESULT 26
US-09-903-461-2/c
; Sequence 2, Application US/09903461
; Patent No. 6602669
; GENERAL INFORMATION:
; APPLICANT: Letsinger, Robert L.
; APPLICANT: Garimella, Viswanadham
; TITLE OF INVENTION: Method of Detection by Enhancement of Silver Staining
; FILE REFERENCE: 00-1086-A
; CURRENT APPLICATION NUMBER: US/09/903,461
; CURRENT FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: 60/217,782
; PRIOR FILING DATE: 2000-07-11
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: Microsoft Word 98
; SEQ ID NO 2
; LENGTH: 30
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic oligomer
US-09-903-461-2

Query Match          6.7%; Score 30; DB 1; Length 30;
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```
Best Local Similarity    100.0%;   Pred. No. 23;
Matches    30; Conservative    0; Mismatches    0; Indels    0; Gaps    0;

Qy      137 CCTGCCGCGCTTCCACCGTTCAATTC TAGAGC 166
          |||
Db       30 CCTGCCGCGCTTCCACCGTTCAATTC TAGAGC 1

RESULT 27
US-10-330-872-4/c
; Sequence 4, Application US/10330872
; Patent No. 6787133
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
; APPLICANT: Weinrich, Scott
; APPLICANT: Atkinson III, Edward
; APPLICANT: Lichtsteiner, Serge
; APPLICANT: Vasserot, Alain
; APPLICANT: Pruzan, Ronald
; TITLE OF INVENTION: Using Purified Telomerase to Identify Telomerase Activators and
; TITLE OF INVENTION: Inhibitors
; FILE REFERENCE: 011/006C
; CURRENT APPLICATION NUMBER: US/10/330,872
; CURRENT FILING DATE: 2002-12-24
; PRIOR APPLICATION NUMBER: 08/510,736
; PRIOR FILING DATE: 1995-08-04
; PRIOR APPLICATION NUMBER: 08/833,377
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 09/717,828
; PRIOR FILING DATE: 2000-11-20
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 4
; LENGTH: 30
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-330-872-4

Query Match                    6.7%; Score 30; DB 1; Length 30;
Best Local Similarity    100.0%;   Pred. No. 23;
Matches    30; Conservative    0; Mismatches    0; Indels    0; Gaps    0;

Qy      167 AACAAAAAATGT CAGCTGCTGC GCCGGTTC 196
          |||
Db       30 AACAAAAAATGT CAGCTGCTGC GCCGGTTC 1

RESULT 28
US-10-330-872-5/c
; Sequence 5, Application US/10330872
; Patent No. 6787133
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
; APPLICANT: Weinrich, Scott
; APPLICANT: Atkinson III, Edward
; APPLICANT: Lichtsteiner, Serge
; APPLICANT: Vasserot, Alain
; APPLICANT: Pruzan, Ronald
; TITLE OF INVENTION: Using Purified Telomerase to Identify Telomerase Activators and
; TITLE OF INVENTION: Inhibitors
; FILE REFERENCE: 011/006C
; CURRENT APPLICATION NUMBER: US/10/330,872
; CURRENT FILING DATE: 2002-12-24
; PRIOR APPLICATION NUMBER: 08/510,736
; PRIOR FILING DATE: 1995-08-04
; PRIOR APPLICATION NUMBER: 08/833,377
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 09/717,828
; PRIOR FILING DATE: 2000-11-20
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Query Match 6.4%; Score 29; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 28;  
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 43 TGTCTAACCTTAAGGAGGCGGTAGG 71  
Db 30 TGTCTAACCTTAAGGAGGCGGTAGG 2

RESULT 30  
US-08-833-377-5/c  
; Sequence 5, Application US/08833377  
; Patent No. 5968506  
; GENERAL INFORMATION:  
; APPLICANT: Weinrich, Scott L.  
; APPLICANT: Atkinson III, Edward M.  
; APPLICANT: Lichtsteiner, Serge P.  
; APPLICANT: Vasserot, Alain P.  
; APPLICANT: Pruzan, Ronald A.  
; APPLICANT: Kealey, James T.  
; TITLE OF INVENTION: Purified Telomerase  
; NUMBER OF SEQUENCES: 15  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/833,377  
; FILING DATE: 04-APR-1997  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/510,736  
; FILING DATE: 04-AUG-1995  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001110US  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 5:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 30 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
; FEATURE:  
; NAME/KEY: modified\_base  
; LOCATION: 1  
; OTHER INFORMATION: /mod\_base= OTHER  
; OTHER INFORMATION: /note= "N = 5' biotinylated guanosine"  
; FEATURE:  
; NAME/KEY: -  
; LOCATION: 1..30  
; OTHER INFORMATION: /note= "Oligo 13"  
US-08-833-377-5

Query Match 6.4%; Score 29; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 28;  
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 167 AAACAAAATGTCAGCTGCTGCCCGTT 195  
|||||

Db 30 AAACAAAATGTCAGCTGCTGCCCGTT 2

RESULT 31  
US-08-833-377-6/c  
; Sequence 6, Application US/08833377  
; Patent No. 5968506  
; GENERAL INFORMATION:  
; APPLICANT: Weinrich, Scott L.  
; APPLICANT: Atkinson III, Edward M.  
; APPLICANT: Lichtsteiner, Serge P.  
; APPLICANT: Vasserot, Alain P.  
; APPLICANT: Pruzan, Ronald A.  
; APPLICANT: Kealey, James T.  
; TITLE OF INVENTION: Purified Telomerase  
; NUMBER OF SEQUENCES: 15  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/833,377  
; FILING DATE: 04-APR-1997  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/510,736  
; FILING DATE: 04-AUG-1995  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001110US  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 6:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 30 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
; FEATURE:  
; NAME/KEY: modified\_base  
; LOCATION: 1  
; OTHER INFORMATION: /mod\_base= OTHER  
; OTHER INFORMATION: /note= "N = 5' biotinylated guanosine"  
; FEATURE:  
; NAME/KEY: -  
; LOCATION: 1..30  
; OTHER INFORMATION: /note= "Oligo 14"  
US-08-833-377-6

Query Match 6.4%; Score 29; DB 1; Length 30;  
Best Local Similarity 100.0%; Pred. No. 28;  
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 137 CCTGCCCGCTTCCACCGTTCATTCTAGAG 165  
Db 30 CCTGCCCGCTTCCACCGTTCATTCTAGAG 2

RESULT 32  
US-09-717-828B-3/c  
; Sequence 3, Application US/09717828B  
; Patent No. 6517834

GENERAL INFORMATION:  
; APPLICANT: Weinrich, Scott L  
; APPLICANT: Atkinson III, Edward M  
; APPLICANT: Lichtsteiner, Serge P  
; APPLICANT: Vasserot, Alain P  
; APPLICANT: Pruzan, Ronald A  
; TITLE OF INVENTION: A Method for Purifying Telomerase  
; FILE REFERENCE: PurifiedTelomerase011base  
; CURRENT APPLICATION NUMBER: US/09/717,828B  
; CURRENT FILING DATE: 2000-11-20  
; PRIOR APPLICATION NUMBER: 09/420,056  
; PRIOR FILING DATE: 1999-10-18  
; PRIOR APPLICATION NUMBER: 08/833,377  
; PRIOR FILING DATE: 1997-04-04  
; PRIOR APPLICATION NUMBER: 08/510,736  
; PRIOR FILING DATE: 1995-08-04  
; NUMBER OF SEQ ID NOS: 11  
; SOFTWARE: PatentIn Ver. 2.1 edited  
; SEQ ID NO 3  
; LENGTH: 30  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; NAME/KEY: misc\_feature  
; LOCATION: (1)  
; OTHER INFORMATION: Biotin 5'-terminal  
; OTHER INFORMATION: Description of Artificial Sequence: Affinity Agent  
US-09-717-828B-3

Query Match 6.3%; Score 28.4; DB 1; Length 30;  
Best Local Similarity 96.7%; Pred. No. 31;  
Matches 29; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 412 GAGCTGTGGGACGTGCACCCAGGACTCGGC 441  
Db 30 GAGCTATGGGACGTGCACCCAGGACTCGGC 1

RESULT 33  
US-09-717-829A-3/C  
; Sequence 3, Application US/09717829A  
; Patent No. 6545133  
; GENERAL INFORMATION:  
; APPLICANT: Weinrich, Scott L  
; APPLICANT: Atkinson III, Edward M  
; APPLICANT: Lichtsteiner, Serge P  
; APPLICANT: Vasserot, Alain P  
; APPLICANT: Pruzan, Ronald A  
; TITLE OF INVENTION: A Method for Purifying Telomerase  
; FILE REFERENCE: PurifiedTelomerase011base  
; CURRENT APPLICATION NUMBER: US/09/717,829A  
; CURRENT FILING DATE: 2000-11-20  
; PRIOR APPLICATION NUMBER: 09/420,056  
; PRIOR FILING DATE: 1999-10-18  
; PRIOR APPLICATION NUMBER: 08/833,377  
; PRIOR FILING DATE: 1997-04-04  
; PRIOR APPLICATION NUMBER: 08/510,736  
; PRIOR FILING DATE: 1995-08-04  
; NUMBER OF SEQ ID NOS: 11  
; SOFTWARE: PatentIn Ver. 2.1 edited  
; SEQ ID NO 3  
; LENGTH: 30  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; NAME/KEY: misc\_feature  
; LOCATION: (1)  
; OTHER INFORMATION: Biotin 5'-terminal  
; OTHER INFORMATION: Description of Artificial Sequence: Affinity Agent  
US-09-717-829A-3

Query Match 6.3%; Score 28.4; DB 1; Length 30;  
Best Local Similarity 96.7%; Pred. No. 31;

Matches 29; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
Qy 412 GAGCTGTGGGACGTGCACCCAGGACTCGGC 441  
Db 30 GAGCTATGGGACGTGCACCCAGGACTCGGC 1

RESULT 34  
US-10-330-872-3/C  
; Sequence 3, Application US/10330872  
; Patent No. 6787133  
; GENERAL INFORMATION:  
; APPLICANT: Geron Corporation  
; APPLICANT: Weinrich, Scott  
; APPLICANT: Atkinson III, Edward  
; APPLICANT: Lichtsteiner, Serge  
; APPLICANT: Vasserot, Alain  
; APPLICANT: Pruzan, Ronald  
; TITLE OF INVENTION: Using Purified Telomerase to Identify Telomerase Activators and  
; TITLE OF INVENTION: Inhibitors  
; FILE REFERENCE: 011/006C  
; CURRENT APPLICATION NUMBER: US/10/330,872  
; CURRENT FILING DATE: 2002-12-24  
; PRIOR APPLICATION NUMBER: 08/510,736  
; PRIOR FILING DATE: 1995-08-04  
; PRIOR APPLICATION NUMBER: 08/833,377  
; PRIOR FILING DATE: 1997-04-04  
; PRIOR APPLICATION NUMBER: 09/420,056  
; PRIOR FILING DATE: 1999-10-18  
; PRIOR APPLICATION NUMBER: 09/717,828  
; PRIOR FILING DATE: 2000-11-20  
; NUMBER OF SEQ ID NOS: 11  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 3  
; LENGTH: 30  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-10-330-872-3

Query Match 6.3%; Score 28.4; DB 1; Length 30;  
Best Local Similarity 96.7%; Pred. No. 31;  
Matches 29; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 412 GAGCTGTGGGACGTGCACCCAGGACTCGGC 441  
Db 30 GAGCTATGGGACGTGCACCCAGGACTCGGC 1

RESULT 35  
US-09-286-959B-3  
; Sequence 3, Application US/09286959B  
; Patent No. 6300131  
; GENERAL INFORMATION:  
; APPLICANT: Johns Hopkins University  
; APPLICANT: Greider, Carol W.  
; APPLICANT: Le, Siyuan  
; TITLE OF INVENTION: TELOMERASE-ASSOCIATED PROTEINS  
; FILE REFERENCE: 07265/157001  
; CURRENT APPLICATION NUMBER: US/09/286,959B  
; CURRENT FILING DATE: 1999-04-06  
; PRIOR APPLICATION NUMBER: 60/080,783  
; PRIOR FILING DATE: 1998-04-06  
; NUMBER OF SEQ ID NOS: 24  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 3  
; LENGTH: 28  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Primer  
US-09-286-959B-3

Query Match 6.2%; Score 28; DB 1; Length 28;

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Best Local Similarity 100.0%; Pred. No. 31;
Matches 28; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 17 GCCTGGGAGGGGTGTGTCACATTTTGG 44
Db 1 GCCTGGGAGGGGTGTGTCACATTTTGG 28

RESULT 36
US-08-833-377-4/c
; Sequence 4, Application US/08833377
; Patent No. 5968506
; GENERAL INFORMATION:
; APPLICANT: Weinrich, Scott L.
; APPLICANT: Atkinson III, Edward M.
; APPLICANT: Lichtsteiner, Serge P.
; APPLICANT: Vasserot, Alain P.
; APPLICANT: Pruzan, Ronald A.
; APPLICANT: Kealey, James T.
; TITLE OF INVENTION: Purified Telomerase
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/833.377
; FILING DATE: 04-APR-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/510.736
; FILING DATE: 04-AUG-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001110US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 30 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: 1
; OTHER INFORMATION: /mod_base= OTHER
; OTHER INFORMATION: /note= "N = 5' biotinylated guanosine"
; FEATURE:
; NAME/KEY: -
; LOCATION: 1..30
; OTHER INFORMATION: /note= "Oligo 5"
US-08-833-377-4

Query Match 6.1%; Score 27.4; DB 1; Length 30;
Best Local Similarity 96.6%; Pred. No. 37;
Matches 28; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 412 GAGCTGTGGGACGTGCACCCAGGACTCGG 440
Db 30 GAGCTATGGGACGTGCACCCAGGACTCGG 2
```

```
RESULT 37
US-08-770-565-26/c
; Sequence 26, Application US/08770565
; Patent No. 5846723
; GENERAL INFORMATION:
; APPLICANT: Kim, Nam Woo
; APPLICANT: Wu, Fred
; APPLICANT: Kealey, James T.
; APPLICANT: Pruzan, Ronald
; APPLICANT: Weinrich, Scott L.
; TITLE OF INVENTION: Methods for Detecting the RNA Component of
; TITLE OF INVENTION: Telomerase
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
; APPLICATION NUMBER: US/08/770,565
; FILING DATE: 20-DEC-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-002300US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-576-0200
; TELEFAX: 415-576-0300
; INFORMATION FOR SEQ ID NO: 26:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 27 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-770-565-26

Query Match 6.0%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 35;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 144 CCTTCCACCGTTCATTCTAGAGCAAC 170
Db 27 CCTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 38
US-08-974-180-32/c
; Sequence 32, Application US/08974180
; Patent No. 6025194
; GENERAL INFORMATION:
; APPLICANT: Funk, Walter
; TITLE OF INVENTION: Methods for Modulating and Identifying
; TITLE OF INVENTION: Cellular Senescence
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Geron Corporation
; STREET: 230 Constitution Drive
; CITY: Menlo Park
; STATE: California
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
```

COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/974,180  
FILING DATE: 19-NOV-1997  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Kaster, Kevin R.  
REGISTRATION NUMBER: 32,704  
REFERENCE/DOCKET NUMBER: 206  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (650) 473-7779  
TELEFAX: (650) 473-8654  
INFORMATION FOR SEQ ID NO: 32:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 27 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA  
FEATURE:  
NAME/KEY: -  
LOCATION: 1..27  
OTHER INFORMATION: /note= "primer hTR445 comp"  
US-08-974-180-32

Query Match 6.0%; Score 27; DB 1; Length 27;  
Best Local Similarity 100.0%; Pred. No. 35;  
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 425 TGCACCCAGGACTCGGCTCACACATGC 451  
|||||  
Db 27 TGCACCCAGGACTCGGCTCACACATGC 1

RESULT 39  
US-08-482-115B-31  
Sequence 31, Application US/08482115B  
Patent No. 5776679  
GENERAL INFORMATION:  
APPLICANT: Villeponteau, Bryant  
APPLICANT: Feng, Junli  
APPLICANT: Funk, Walter  
APPLICANT: Andrews, William H.  
TITLE OF INVENTION: Assays for the RNA Component of Human  
NUMBER OF SEQUENCES: 40  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/482,115B  
FILING DATE: 07-JUN-1995  
CLASSIFICATION: 435  
PRIOR APPLICATION NUMBER: US 08/272,102  
FILING DATE: 07-JUL-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/330,123  
FILING DATE: 27-OCT-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-000830US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 40:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 28 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: RNA  
US-08-482-115B-40

Query Match 5.9%; Score 26.4; DB 1; Length 28;

REFERENCE/DOCKET NUMBER: 015389-000830US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 31:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 28 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA  
US-08-482-115B-31

Query Match 5.9%; Score 26.4; DB 1; Length 28;  
Best Local Similarity 96.4%; Pred. No. 41;  
Matches 27; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 17 GCCTGGGAGGGTGGTGGCCATTTTGG 44  
|||||  
Db 1 GCCTGGGAGGGTGGTGGCTATTTTGG 28

RESULT 40  
US-08-482-115B-40  
Sequence 40, Application US/08482115B  
Patent No. 5776679  
GENERAL INFORMATION:  
APPLICANT: Villeponteau, Bryant  
APPLICANT: Feng, Junli  
APPLICANT: Funk, Walter  
APPLICANT: Andrews, William H.  
TITLE OF INVENTION: Assays for the RNA Component of Human  
NUMBER OF SEQUENCES: 40  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/482,115B  
FILING DATE: 07-JUN-1995  
CLASSIFICATION: 435  
PRIOR APPLICATION NUMBER: US 08/272,102  
FILING DATE: 07-JUL-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/330,123  
FILING DATE: 27-OCT-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-000830US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 40:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 28 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: RNA  
US-08-482-115B-40

Query Match 5.9%; Score 26.4; DB 1; Length 28;



```
Best Local Similarity 64.3%; Pred. No. 41;
Matches 18; Conservative 9; Mismatches 1; Indels 0; Gaps 0;

Qy 17 GCCTGGGAGGGTGGTGGCCATTTTGG 44
|||:|||||:|||||:|||||:|||||:
Db 1 GCCUGGAGGGGUGGUGGCUUUUUUG 28

RESULT 41
US-08-472-802C-38
; Sequence 38, Application US/08472802C
; Patent No. 5956680
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 44
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/472,802C
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M.
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 15389-000820
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 38:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 28 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-472-802C-38

Query Match 5.9%; Score 26.4; DB 1; Length 28;
Best Local Similarity 96.4%; Pred. No. 41;
Matches 27; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 17 GCCTGGGAGGGTGGTGGCCATTTTGG 44
|||:|||||:|||||:|||||:|||||:
Db 1 GCCUGGAGGGGUGGUGGCUUUUUUG 28

RESULT 42
US-08-330-123A-23/c
; Sequence 23, Application US/08330123A
; Patent No. 5583016
; GENERAL INFORMATION:
; APPLICANT: VILLEPONTEAU, Bryant
; APPLICANT: FENG, Junli
; APPLICANT: FUNK, Walter

Best Local Similarity 64.3%; Pred. No. 41;
Matches 18; Conservative 9; Mismatches 1; Indels 0; Gaps 0;
```

```
; APPLICANT: ANDREWS, William H.
; TITLE OF INVENTION: HUMAN TELOMERASE
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend Khourie and Crew
; STREET: 379 Lytton Avenue
; CITY: Palo Alto
; STATE: California
; COUNTRY: US
; ZIP: 94301
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/330,123A
; FILING DATE: 27-OCT-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M.
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 15389-000810
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 326-2400
; TELEFAX: (415) 326-2422
; INFORMATION FOR SEQ ID NO: 23:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-330-123A-23

Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATTCTAGAGCAAC 170
|||||:|||||:|||||:|||||:
Db 26 CTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 43
US-08-482-115B-23/c
; Sequence 23, Application US/08482115B
; Patent No. 5776679
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Assays for the RNA Component of Human
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/482,115B
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; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000830US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; INFORMATION FOR SEQ ID NO: 23:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-482-115B-23

Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTCATCTAGAGCAAC 170
Db 26 CTTCCACCGTTCATCTAGAGCAAC 1

RESULT 44
US-08-482-115B-29
; Sequence 29, Application US/08482115B
; Patent No. 5776679
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Assays for the RNA Component of Human
; TITLE OF INVENTION: Telomerase
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/482,115B
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000830US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
```

```
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-482-115B-29

Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 45 TCTAACCCCTAACTGAGAGGGCGGTAG 70
Db 1 TCTAACCCCTAACTGAGAGGGCGGTAG 26

RESULT 45
US-08-660-678A-23/c
; Sequence 23, Application US/08660678A
; Patent No. 5837857
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,678A
; FILING DATE: 05-JUN-1996
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000811US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 23:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-660-678A-23

Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTCATCTAGAGCAAC 170
```

Db 26 CTTCCACCGTTCTATTCTAGCAAC 1  
|||||

RESULT 46  
US-08-770-565-25  
; Sequence 25, Application US/08770565  
; Patent No. 5846723  
; GENERAL INFORMATION:  
; APPLICANT: Kim, Nam woo  
; APPLICANT: Wu, Fred  
; APPLICANT: Kealey, James T.  
; APPLICANT: Pruzan, Ronald  
; APPLICANT: Weinrich, Scott L.  
; TITLE OF INVENTION: Methods for Detecting the RNA Component of  
; TITLE OF INVENTION: Telomerase  
; NUMBER OF SEQUENCES: 26  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP  
; STREET: Two Embarcadero Center, 8th Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/770,565  
; FILING DATE: 20-DEC-1996  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-002300US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 415-576-0200  
; TELEFAX: 415-576-0300  
; INFORMATION FOR SEQ ID NO: 25:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 26 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
US-08-770-565-25  
  
Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 40;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
Qy 60 GAAGGGCGTAGCGCGCGTCTTTGC 85  
|||||

Db 1 GAAGGGCGTAGCGCGCGTCTTTGC 26  
|||||

RESULT 47  
US-08-710-249-25  
; Sequence 25, Application US/08710249  
; Patent No. 5858777  
; GENERAL INFORMATION:  
; APPLICANT: Viliepointeau, Bryant  
; APPLICANT: Feng, Junli  
; APPLICANT: Andrews, William H.  
; APPLICANT: Adams, Robert R.  
; TITLE OF INVENTION: Methods and Reagents for Regulating  
; TITLE OF INVENTION: Telomere Length and Telomerase Activity  
; NUMBER OF SEQUENCES: 26  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor

; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/710,249  
; FILING DATE: 13-SEP-1996  
; CLASSIFICATION: 536  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/583,808  
; FILING DATE: 05-JAN-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 60/003,492  
; FILING DATE: 08-SEP-1995  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001220US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 25:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 26 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
US-08-710-249-25  
  
Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 40;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
Qy 45 TCTAACCCCTAACTGAGAGGCGGTAG 70  
|||||

Db 1 TCTAACCCCTAACTGAGAGGCGGTAG 26  
|||||

RESULT 48  
US-08-710-249-26/c  
; Sequence 26, Application US/08710249  
; Patent No. 5858777  
; GENERAL INFORMATION:  
; APPLICANT: Viliepointeau, Bryant  
; APPLICANT: Feng, Junli  
; APPLICANT: Andrews, William H.  
; APPLICANT: Adams, Robert R.  
; TITLE OF INVENTION: Methods and Reagents for Regulating  
; TITLE OF INVENTION: Telomere Length and Telomerase Activity  
; NUMBER OF SEQUENCES: 26  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/710,249  
; FILING DATE: 13-SEP-1996  
; CLASSIFICATION: 536  
; PRIOR APPLICATION DATA:

/ APPLICATION NUMBER: US 08/583,808  
/ FILING DATE: 05-JAN-1996  
/ PRIOR APPLICATION DATA:  
/ APPLICATION NUMBER: US 60/003,492  
/ FILING DATE: 08-SEP-1995  
/ ATTORNEY/AGENT INFORMATION:  
/ NAME: Storella, John R.  
/ REGISTRATION NUMBER: 32,944  
/ REFERENCE/DOCKET NUMBER: 015389-001220US  
/ TELEPHONE: (415) 576-0200  
/ TELEFAX: (415) 576-0300  
/ INFORMATION FOR SEQ ID NO: 26:  
/ SEQUENCE CHARACTERISTICS:  
/ LENGTH: 26 base pairs  
/ TYPE: nucleic acid  
/ STRANDEDNESS: single  
/ TOPOLOGY: linear  
/ MOLECULE TYPE: DNA  
US-08-710-249-26

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 40;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTCATTCTAGAGCAAAAC 170  
Db 26 CTTCCACCGTTCATTCTAGAGCAAAAC 1

RESULT 49  
US-08-485-778-19/c  
/ Sequence 19, Application US/08485778  
/ Patent No. 5876979  
/ GENERAL INFORMATION:  
/ APPLICANT: Andrews, William H.  
/ APPLICANT: Avilion, Ariel Athena  
/ APPLICANT: Feng, Junli  
/ APPLICANT: Funk, Walter  
/ APPLICANT: Greider, Carol  
/ APPLICANT: Marhuenda, Maria Antonia Blasco  
/ APPLICANT: Villeponteau, Bryant  
/ TITLE OF INVENTION: RNA COMPONENT OF TELOMERASE  
/ NUMBER OF SEQUENCES: 45  
/ CORRESPONDENCE ADDRESS:  
/ ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.  
/ STREET: Two Militia Drive  
/ CITY: Lexington  
/ STATE: MA  
/ COUNTRY: US  
/ ZIP: 02173  
/ COMPUTER READABLE FORM:  
/ MEDIUM TYPE: Floppy disk  
/ COMPUTER: IBM PC compatible  
/ OPERATING SYSTEM: PC-DOS/MS-DOS  
/ SOFTWARE: Patent In Release #1.0, Version #1.30  
/ CURRENT APPLICATION DATA:  
/ APPLICATION NUMBER: US/08/485,778  
/ FILING DATE: 07-JE-1995  
/ CLASSIFICATION: 435  
/ PRIOR APPLICATION DATA:  
/ APPLICATION NUMBER: US 08/387,524  
/ FILING DATE: 13-FEB-1995  
/ PRIOR APPLICATION DATA:  
/ APPLICATION NUMBER: US 08/330,123  
/ FILING DATE: 27-OCT-1994  
/ PRIOR APPLICATION DATA:  
/ APPLICATION NUMBER: US 08/272,102  
/ FILING DATE: 07-JUL-1994  
/ ATTORNEY/AGENT INFORMATION:  
/ NAME: Granahan, Patricia  
/ REGISTRATION NUMBER: 32,227  
/ REFERENCE/DOCKET NUMBER: CSHL94-05A4

/ TELECOMMUNICATION INFORMATION:  
/ TELEPHONE: 617-861-6240  
/ TELEFAX: 617-861-9540  
/ INFORMATION FOR SEQ ID NO: 19:  
/ SEQUENCE CHARACTERISTICS:  
/ LENGTH: 26 base pairs  
/ TYPE: nucleic acid  
/ STRANDEDNESS: single  
/ TOPOLOGY: linear  
US-08-485-778-19

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 40;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTCATTCTAGAGCAAAAC 170  
Db 26 CTTCCACCGTTCATTCTAGAGCAAAAC 1

RESULT 50  
US-08-472-802C-24/c  
/ Sequence 24, Application US/08472802C  
/ Patent No. 5958680  
/ GENERAL INFORMATION:  
/ APPLICANT: Villeponteau, Bryant  
/ APPLICANT: Feng, Junli  
/ APPLICANT: Andrews, William H.  
/ TITLE OF INVENTION: Mammalian Telomerase  
/ NUMBER OF SEQUENCES: 44  
/ CORRESPONDENCE ADDRESS:  
/ ADDRESSEE: Townsend and Townsend and Crew LLP  
/ STREET: Two Embarcadero Center, Eighth Floor  
/ CITY: San Francisco  
/ STATE: California  
/ COUNTRY: USA  
/ ZIP: 94111-3834  
/ COMPUTER READABLE FORM:  
/ MEDIUM TYPE: Floppy disk  
/ COMPUTER: IBM PC compatible  
/ OPERATING SYSTEM: PC-DOS/MS-DOS  
/ SOFTWARE: Patent In Release #1.0, Version #1.30  
/ CURRENT APPLICATION DATA:  
/ APPLICATION NUMBER: US/08/472,802C  
/ FILING DATE: 07-JUN-1995  
/ CLASSIFICATION: 514  
/ PRIOR APPLICATION DATA:  
/ APPLICATION NUMBER: US 08/272,102  
/ FILING DATE: 07-JUL-1994  
/ PRIOR APPLICATION DATA:  
/ APPLICATION NUMBER: US 08/330,123  
/ FILING DATE: 27-OCT-1994  
/ ATTORNEY/AGENT INFORMATION:  
/ NAME: Smith, William M.  
/ REGISTRATION NUMBER: 30,223  
/ REFERENCE/DOCKET NUMBER: 15389-000820  
/ TELECOMMUNICATION INFORMATION:  
/ TELEPHONE: (415) 576-0200  
/ TELEFAX: (415) 576-0300  
/ INFORMATION FOR SEQ ID NO: 24:  
/ SEQUENCE CHARACTERISTICS:  
/ LENGTH: 26 base pairs  
/ TYPE: nucleic acid  
/ STRANDEDNESS: single  
/ TOPOLOGY: linear  
/ MOLECULE TYPE: DNA  
US-08-472-802C-24

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 40;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTCATTCTAGAGCAAAAC 170

[illegible]

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/ APPLICATION NUMBER: US/08/974,180
/ FILING DATE: 19-NOV-1997
/ CLASSIFICATION: 435
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Kaster, Kevin R.
/ REGISTRATION NUMBER: 32,704
/ REFERENCE/DOCKET NUMBER: 206
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (650) 473-7779
/ TELEFAX: (650) 473-8654
/ INFORMATION FOR SEQ ID NO: 33:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 26 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA
/ FEATURE:
/ NAME/KEY: -
/ LOCATION: 1..26
/ OTHER INFORMATION: /note= "primer hTR S328"
US-08-974-180-33

Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 306 TTGGGCTCTGTGACGCGGGGTCTCT 331
Db 1 TTGGGCTCTGTGACGCGGGGTCTCT 26

RESULT 54
US-08-998-443-23/c
/ Sequence 23, Application US/08998443
/ Patent No. 6054575
/ GENERAL INFORMATION:
/ APPLICANT: Villeponteau, Bryant
/ APPLICANT: Feng, Junli
/ APPLICANT: Funk, Walter
/ APPLICANT: Andrews, William H.
/ TITLE OF INVENTION: Mammalian Telomerase
/ NUMBER OF SEQUENCES: 30
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Townsend and Townsend and Crew LLP
/ STREET: Two Embarcadero Center, Eighth Floor
/ CITY: San Francisco
/ STATE: California
/ COUNTRY: USA
/ ZIP: 94111-3834
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION NUMBER: US/08/998,443
/ FILING DATE:
/ CLASSIFICATION:
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US/08/660,678
/ FILING DATE: 05-JUN-1996
/ APPLICATION NUMBER: US 08/330,123
/ FILING DATE: 27-OCT-1994
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/272,102
/ FILING DATE: 07-JUL-1994
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Storella, John R.
/ REGISTRATION NUMBER: 32,944
/ REFERENCE/DOCKET NUMBER: 015389-000811US
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 576-0200
```

```
/ TELEFAX: (415) 576-0300
/ INFORMATION FOR SEQ ID NO: 23:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 26 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA
US-08-998-443-23

Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTTCATTCTAGAGCAAC 170
Db 26 CTTCCACCGTTTCATTCTAGAGCAAC 1

RESULT 55
US-08-974-549A-597
/ Sequence 597, Application US/08974549A
/ Patent No. 6166178
/ GENERAL INFORMATION:
/ APPLICANT: Cech, Thomas R.
/ APPLICANT: Lingner, Joachim
/ APPLICANT: Nakamura, Toru
/ APPLICANT: Chapman, Karen B.
/ APPLICANT: Morin, Gregg B.
/ APPLICANT: Harley, Calvin B.
/ APPLICANT: Andrews, William H.
/ TITLE OF INVENTION: Human Telomerase Catalytic Subunit
/ NUMBER OF SEQUENCES: 727
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Townsend and Townsend and Crew LLP
/ STREET: Two Embarcadero Center, Eighth Floor
/ CITY: San Francisco
/ STATE: California
/ COUNTRY: USA
/ ZIP: 94111-3834
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION NUMBER: US/08/974,549A
/ FILING DATE: 19-NOV-1997
/ CLASSIFICATION: 536
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/724,643
/ FILING DATE: 01-OCT-1996
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/844,419
/ FILING DATE: 18-APR-1997
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/846,017
/ FILING DATE: 25-APR-1997
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/851,843
/ FILING DATE: 06-MAY-1997
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/854,050
/ FILING DATE: 09-MAY-1997
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/911,312
/ FILING DATE: 14-AUG-1997
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/912,951
/ FILING DATE: 14-AUG-1997
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/915,503
/ FILING DATE: 14-AUG-1997
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;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: WO PCT/US97/17618  
;; FILING DATE: 01-OCT-1997  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: WO PCT/US97/17885  
;; FILING DATE: 01-OCT-1997  
;; ATTORNEY/AGENT INFORMATION:  
;; NAME: Apple, Randolph Ted  
;; REGISTRATION NUMBER: 36,429  
;; REFERENCE/DOCKET NUMBER: 015389-002610US  
;; TELECOMMUNICATION INFORMATION:  
;; TELEPHONE: (415) 576-0200  
;; TELEFAX: (415) 576-0300  
;; INFORMATION FOR SEQ ID NO: 597:  
;; SEQUENCE CHARACTERISTICS:  
;; LENGTH: 26 base pairs  
;; TYPE: nucleic acid  
;; STRANDEDNESS: single  
;; TOPOLOGY: linear  
;; MOLECULE TYPE: DNA  
;; FEATURE:  
;; NAME/KEY: -  
;; LOCATION: 1..26  
;; OTHER INFORMATION: /note= "F3b primer"  
US-08-974-549A-597

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 40;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 45 TCTAACCTTAAGGCGGTAG 70  
Db 1 TCTAACCTTAAGGCGGTAG 26

## RESULT 56

US-08-974-549A-598/c  
; Sequence 598, Application US/08974549A  
; Patent No. 6166178  
; GENERAL INFORMATION:  
; APPLICANT: Cech, Thomas R.  
; APPLICANT: Lingner, Joachim  
; APPLICANT: Nakamura, Toru  
; APPLICANT: Chapman, Karen B.  
; APPLICANT: Morin, Gregg B.  
; APPLICANT: Harley, Calvin B.  
; APPLICANT: Andrews, William H.  
; TITLE OF INVENTION: Human Telomerase Catalytic Subunit  
; NUMBER OF SEQUENCES: 727  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/974,549A  
; FILING DATE: 19-NOV-1997  
; CLASSIFICATION: 536  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/724,643  
; FILING DATE: 01-OCT-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/844,419  
; FILING DATE: 18-APR-1997  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/846,017

;; FILING DATE: 25-APR-1997  
;; PRIOR APPLICATION DATA: US 08/851,843  
;; FILING DATE: 06-MAY-1997  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: US 08/854,050  
;; FILING DATE: 09-MAY-1997  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: US 08/911,312  
;; FILING DATE: 14-AUG-1997  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: US 08/912,951  
;; FILING DATE: 14-AUG-1997  
;; APPLICATION NUMBER: US 08/915,503  
;; FILING DATE: 14-AUG-1997  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: WO PCT/US97/17618  
;; FILING DATE: 01-OCT-1997  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: WO PCT/US97/17885  
;; FILING DATE: 01-OCT-1997  
;; ATTORNEY/AGENT INFORMATION:  
;; NAME: Apple, Randolph Ted  
;; REGISTRATION NUMBER: 36,429  
;; REFERENCE/DOCKET NUMBER: 015389-002610US  
;; TELECOMMUNICATION INFORMATION:  
;; TELEPHONE: (415) 576-0200  
;; TELEFAX: (415) 576-0300  
;; INFORMATION FOR SEQ ID NO: 598:  
;; SEQUENCE CHARACTERISTICS:  
;; LENGTH: 26 base pairs  
;; TYPE: nucleic acid  
;; STRANDEDNESS: single  
;; TOPOLOGY: linear  
;; MOLECULE TYPE: DNA  
;; FEATURE:  
;; NAME/KEY: -  
;; LOCATION: 1..26  
;; OTHER INFORMATION: /note= "R3c primer"  
US-08-974-549A-598

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 40;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATTCTAGAGCAAC 170  
Db 26 CTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 57  
US-09-060-523-23/c  
; Sequence 23, Application US/09060523  
; Patent No. 6258535  
; GENERAL INFORMATION:  
; APPLICANT: Villeponteau, Bryant  
; APPLICANT: Feng, Junli  
; APPLICANT: Funk, Walter  
; APPLICANT: Andrews, William H.  
; TITLE OF INVENTION: Mammalian Telomerase  
; NUMBER OF SEQUENCES: 25  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS

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; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/060,523
; FILING DATE: 14-APR-1998
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/660,678
; FILING DATE: 05-JUN-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000813US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 23:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-060-523-23

Query Match          5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCACCGTTCATCTAGAGCAAC 170
Db 26 CTTCACCGTTCATCTAGAGCAAC 1

RESULT 58
US-09-220-157A-25
; Sequence 25, Application US/09220157A
; Patent No. 6300110
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Adams, William H.
; TITLE OF INVENTION: Methods and Reagents for Regulating
; TITLE OF INVENTION: Telomere Length and Telomerase Activity
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/220,157A
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/710,249
; FILING DATE: 13-SEP-1996
; APPLICATION NUMBER: US 08/583,808
; FILING DATE: 05-JAN-1996
; PRIOR APPLICATION DATA:
```

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; APPLICATION NUMBER: US 60/003,492
; FILING DATE: 08-SEP-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001220US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-220-157A-25

Query Match          5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 45 TCTAACCCCTAACTGAGAGGGCGTAG 70
Db 1 TCTAACCCCTAACTGAGAGGGCGTAG 26

RESULT 59
US-09-220-157A-26/c
; Sequence 26, Application US/09220157A
; Patent No. 6300110
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Adams, William H.
; TITLE OF INVENTION: Methods and Reagents for Regulating
; TITLE OF INVENTION: Telomere Length and Telomerase Activity
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/220,157A
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/710,249
; FILING DATE: 13-SEP-1996
; APPLICATION NUMBER: US 08/583,808
; FILING DATE: 05-JAN-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/003,492
; FILING DATE: 08-SEP-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001220US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 26:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
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```
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-220-157A-26

Query Match          5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTTCATTCTAGAGCAAAAC 170
Db 26 CTTCCACCGTTTCATTCTAGAGCAAAAC 1

RESULT 60
US-09-286-959B-4/c
; Sequence 4, Application US/09286959B
; Patent No. 6300131
; GENERAL INFORMATION:
; APPLICANT: Johns Hopkins University
; APPLICANT: Greider, Carol W.
; APPLICANT: Le, Siyuan
; TITLE OF INVENTION: TELOMERASE-ASSOCIATED PROTEINS
; FILE REFERENCE: 07265/157001
; CURRENT APPLICATION NUMBER: US/09/286.959B
; CURRENT FILING DATE: 1999-04-06
; PRIOR APPLICATION NUMBER: 60/080,783
; PRIOR FILING DATE: 1998-04-06
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 26
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Primer
US-09-286-959B-4

Query Match          5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTTCATTCTAGAGCAAAAC 170
Db 26 CTTCCACCGTTTCATTCTAGAGCAAAAC 1

RESULT 61
US-09-580-517-23/c
; Sequence 23, Application US/09580517
; Patent No. 6320039
; GENERAL INFORMATION:
; APPLICANT: VILLEPONTEAU, Bryant
; APPLICANT: FENG, Junli
; APPLICANT: FUNK, Walter
; APPLICANT: ANDREWS, William H.
; TITLE OF INVENTION: HUMAN TELOMERASE
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend Khourie and Crew
; STREET: 379 Lytton Avenue
; CITY: Palo Alto
; STATE: California
; COUNTRY: US
; ZIP: 94301
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/580,517
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; FILING DATE: 25-May-2000
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/330,123
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 15389-000810
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 326-2400
; TELEFAX: (415) 326-2422
; INFORMATION FOR SEQ ID NO: 23:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 23:
US-09-580-517-23

Query Match          5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTTCATTCTAGAGCAAAAC 170
Db 26 CTTCCACCGTTTCATTCTAGAGCAAAAC 1

RESULT 62
US-08-912-951-311
; Sequence 311, Application US/08912951
; Patent No. 6475789
; GENERAL INFORMATION:
; APPLICANT: Cech, Thomas R.
; APPLICANT: Lingner, Joachim
; APPLICANT: Nakamura, Toru
; APPLICANT: Chapman, Karen B.
; APPLICANT: Morin, Gregg B.
; APPLICANT: Harley, Calvin
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: HUMAN TELOMERASE CATALYTIC SUBUNIT:
; TITLE OF INVENTION: THERAPEUTIC METHODS
; NUMBER OF SEQUENCES: 335
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: United States of America
; ZIP: 94111
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/912,951
; FILING DATE: 14-AUG-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/854,050
; FILING DATE: 09-MAY-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/851,843
; FILING DATE: 06-MAY-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/846,017
; FILING DATE: 25-APR-1997
```

```
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/844,419
; FILING DATE: 18-APR-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/724,643
; FILING DATE: 01-OCT-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph T.
; REGISTRATION NUMBER: 36,429
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 311:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-08-912-951-311

Query Match          5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 45 TCTAACCTTAACCTGAGAGGGCGTAG 70
Db 1 TCTAACCTTAACCTGAGAGGGCGTAG 26

RESULT 63
US-08-912-951-312/c
; Sequence 312, Application US/08912951
; Patent No. 6475789
; GENERAL INFORMATION:
; APPLICANT: Cech, Thomas R.
; APPLICANT: Lingner, Joachim
; APPLICANT: Nakamura, Toru
; APPLICANT: Chapman, Karen B.
; APPLICANT: Morin, Gregg B.
; APPLICANT: Harley, Calvin
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: HUMAN TELOMERASE CATALYTIC SUBUNIT: DIAGNOSTIC AND
; THERAPEUTIC METHODS
; NUMBER OF SEQUENCES: 335
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: United States of America
; ZIP: 94111
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/912,951
; FILING DATE: 14-AUG-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/854,050
; FILING DATE: 09-MAY-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/851,843
; FILING DATE: 06-MAY-1997
; CLASSIFICATION: 435
```

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; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/846,017
; FILING DATE: 25-APR-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/844,419
; FILING DATE: 18-APR-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/724,643
; FILING DATE: 01-OCT-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph T.
; REGISTRATION NUMBER: 36,429
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 312:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-08-912-951-312

Query Match          5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTCATTCTAGAGCAAC 170
Db 26 CTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 64
US-09-057-351-23/c
; Sequence 23, Application US/09057351
; Patent No. 6548298
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,802
; FILING DATE: 07-JUN-1995
```

```
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000821US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 23:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-057-351-23

Query Match          5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCAATCTAGAGCAAAAC 170
Db 26 CTTCCACCGTTCAATCTAGAGCAAAAC 1

RESULT 65
US-09-057-351-30
; Sequence 30, Application US/09057351
; Patent No. 6548298
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,802
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000821US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
```

```
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-057-351-30

Query Match          5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 45 TCTAACCCCTAACTGAGAAGGCGGTAG 70
Db 1 TCTAACCCCTAACTGAGAAGGCGGTAG 26

RESULT 66
US-09-653-573--4
; Sequence 4, Application US/09653573
; Patent No. 6607898
; GENERAL INFORMATION:
; APPLICANT: Kopreski, Michael S.
; APPLICANT: Gocke, Christopher D.
; TITLE OF INVENTION: Method for Detection of hTR and hTERT
; FILE REFERENCE: 00-1328
; CURRENT APPLICATION NUMBER: US/09/653,573
; CURRENT FILING DATE: 2000-08-31
; PRIOR APPLICATION NUMBER: 09/653,573
; PRIOR FILING DATE: 2000-08-31
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4
; LENGTH: 26
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-653-573-4

Query Match          5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 45 TCTAACCCCTAACTGAGAAGGCGGTAG 70
Db 1 TCTAACCCCTAACTGAGAAGGCGGTAG 26

RESULT 67
US-09-653-573-5/c
; Sequence 5, Application US/09653573
; Patent No. 6607898
; GENERAL INFORMATION:
; APPLICANT: Kopreski, Michael S.
; APPLICANT: Gocke, Christopher D.
; TITLE OF INVENTION: Method for Detection of hTR and hTERT
; FILE REFERENCE: 00-1328
; CURRENT APPLICATION NUMBER: US/09/653,573
; CURRENT FILING DATE: 2000-08-31
; PRIOR APPLICATION NUMBER: 09/653,573
; PRIOR FILING DATE: 2000-08-31
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 5
; LENGTH: 26
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-653-573-5

Query Match          5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCAATCTAGAGCAAAAC 170
Db 26 CTTCCACCGTTCAATCTAGAGCAAAAC 1
```

Query Match 5.8%; Score 26; DB 1; Length 26;



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/ APPLICATION NUMBER: WO PCT/US97/17618
/ FILING DATE: 01-OCT-1997
/ APPLICATION NUMBER: WO PCT/US97/17885
/ FILING DATE: 01-OCT-1997
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Apple, Randolph Ted
/ REGISTRATION NUMBER: 36,429
/ REFERENCE/DOCKET NUMBER: 015389-002610US
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 576-0200
/ TELEFAX: (415) 576-0300
/ INFORMATION FOR SEQ ID NO: 598:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 26 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA
/ FEATURE:
/ NAME/KEY: -
/ LOCATION: 1..26
/ OTHER INFORMATION: /note= "R3c primer"
/ SEQUENCE DESCRIPTION: SEQ ID NO: 598:
US-09-721-456-598
```

```
Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 145 CTTCCACCGTTCATTCTAGAGCAAC 170
Db 26 CTTCCACCGTTCATTCTAGAGCAAC 1
```

```
RESULT 72
US-08-630-019A-26
; Sequence 26, Application US/08630019A
; Patent No. 6015710
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David
; APPLICANT: No. 6015710ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; TITLE OF INVENTION: Peptide Nucleic Acids
; NUMBER OF SEQUENCES: 46
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; FILING DATE: 09-JUN-1996
; CLASSIFICATION: 536
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001600US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 26:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 25 base pairs
```

```
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: other nucleic acid
/ DESCRIPTION: /desc = "peptide nucleic acid (PNA),
/ DESCRIPTION: where (deoxy)ribose-phosphate linkages are replaced by
/ DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via
/ DESCRIPTION: glycine amino nitrogen through a methylenecarbonyl linker"
US-08-630-019A-26
```

```
Query Match 5.5%; Score 25; DB 1; Length 25;
Best Local Similarity 72.0%; Pred. No. 45;
Matches 18; Conservative 7; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 41 TTTGTCTAACCTTAACCTGAGAGGG 65
Db 1 UUUGUCUAAACCUAACUCUGAGAGGG 25
```

```
RESULT 73
US-08-630-019A-36
; Sequence 36, Application US/08630019A
; Patent No. 6015710
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David
; APPLICANT: No. 6015710ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; TITLE OF INVENTION: Peptide Nucleic Acids
; NUMBER OF SEQUENCES: 46
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; FILING DATE: 09-JUN-1996
; CLASSIFICATION: 536
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001600US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 36:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 25 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: RNA (genomic)
US-08-630-019A-36
```

```
Query Match 5.5%; Score 25; DB 1; Length 25;
Best Local Similarity 72.0%; Pred. No. 45;
Matches 18; Conservative 7; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 41 TTTGTCTAACCTTAACCTGAGAGGG 65
Db 1 UUUGUCUAAACCUAACUCUGAGAGGG 25
```

```

: CITY: San Francisco
: STATE: California
: COUNTRY: USA
: ZIP: 94111-3834
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: PatentIn Release #1.0, Version #1.30
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/09/349,532
: FILING DATE:
: CLASSIFICATION:
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 08/838,545
: FILING DATE: 09-APR-1997
: APPLICATION NUMBER: US 08/630,019
: FILING DATE: 09-APR-1996
: ATTORNEY/AGENT INFORMATION:
: NAME: Storella, John R.
: REGISTRATION NUMBER: 32,944
: REFERENCE/DOCKET NUMBER: 015389-001610US
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: (415) 576-0200
: TELEFAX: (415) 576-0300
: INFORMATION FOR SEQ ID NO: 40:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 25 base pairs
: TYPE: nucleic acid
: STRANDEDNESS: single
: TOPOLOGY: linear
: MOLECULE TYPE: RNA (genomic)
: US-09-349-532-40

Query Match          5.5%; Score 25; DB 1; Length 25;
Best Local Similarity 72.0%; Pred. No. 45;
Matches 18; Conservative 7; Mismatches 0; Indels

Qy 41 TTGTCTAACCCCTAACTGAGAGGG 55
   ::::|::|::|::|::|::|::|::|
Db 1 UUUGCUAACCCUACUGAGAGGG 25

RESULT 76
US-08-482-115B-28/c
: Sequence 28, Application US/08482115B
: Patent No. 5776679
: GENERAL INFORMATION:
: APPLICANT: Villeponteau, Bryant
: APPLICANT: Feng, Junli
: APPLICANT: Funk, Walter
: APPLICANT: Andrews, William H.
: TITLE OF INVENTION: Assays for the RNA Component of Human
: TITLE OF INVENTION: Telomerase
: NUMBER OF SEQUENCES: 40
: CORRESPONDENCE ADDRESS:
: ADDRESS: Townsend and Crew LLP
: STREET: Two Embarcadero Center, Eighth Floor
: CITY: San Francisco
: STATE: California
: COUNTRY: USA
: ZIP: 94111-3834
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: PatentIn Release #1.0, Version #1.30
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/482,115B
: FILING DATE: 07-JUN-1995
: CLASSIFICATION: 435
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 08/272,102

```

```
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000830US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 28:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 28 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-482-115B-28

Query Match 5.5%; Score 25; DB 1; Length 28;
Best Local Similarity 100.0%; Pred. No. 52;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 81 TTGTCTCCCGCGCGCTGTTTTCT 105
Db 25 TTGTCTCCCGCGCGCTGTTTTCT 1

RESULT 77
US-08-472-802C-29/c
; Sequence 29, Application US/08472802C
; Patent No. 5958680
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 44
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/472,802C
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 28 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-057-351-29/c
; Sequence 29, Application US/09057351
; Patent No. 6548298
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 28 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-057-351-29
```

```
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-472-802C-29

Query Match 5.5%; Score 25; DB 1; Length 28;
Best Local Similarity 100.0%; Pred. No. 52;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 81 TTGTCTCCCGCGCGCTGTTTTCT 105
Db 25 TTGTCTCCCGCGCGCTGTTTTCT 1

RESULT 78
US-09-057-351-29/c
; Sequence 29, Application US/09057351
; Patent No. 6548298
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 28 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-057-351-29

Query Match 5.5%; Score 25; DB 1; Length 28;
Best Local Similarity 100.0%; Pred. No. 52;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 81 TTGTCTCCCGCGCGCTGTTTTCT 105
Db 25 TTGTCTCCCGCGCGCTGTTTTCT 1
```



```
RESULT 79
US-08-770-565-2/c
; Sequence 2, Application US/08770565
; Patent No. 5846723
; GENERAL INFORMATION:
; APPLICANT: Kim, Nam Woo
; APPLICANT: Wu, Fred
; APPLICANT: Kealey, James T.
; APPLICANT: Pruzan, Ronald
; APPLICANT: Weinrich, Scott L.
; TITLE OF INVENTION: Methods for Detecting the RNA Component of
; TITLE OF INVENTION: Telomerase
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: TOWNSEND AND TOWNSEND AND CREW LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION NUMBER: US/08770,565
; FILING DATE: 20-DEC-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-002300US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-576-0200
; TELEFAX: 415-576-0300
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 30 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-770-565-2
Query Match 5.4%; Score 24.4; DB 1; Length 30;
Best Local Similarity 96.2%; Pred. No. 62;
Matches 25; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 355 CCTTTCAGGCCGCGAGGAGGACG 380
Db 26 CGTTTCAGGCCGCGAGGAGGACG 1

RESULT 80
US-08-838-545-25
; Sequence 25, Application US/08838545
; Patent No. 6046307
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6046307ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; TITLE OF INVENTION: Peptide Nucleic Acids
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
```

```
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/838,545
; FILING DATE: 09-APR-1997
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/630,019
; FILING DATE: 09-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 24 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"
US-08-838-545-25
Query Match 5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 52;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 41 TTTGTCTAACCCCTAACTGAGAAGG 64
Db 1 TTTGTCTAACCCCTAACTGAGAAGG 24

RESULT 81
US-09-349-532-25
; Sequence 25, Application US/09349532
; Patent No. 6294650
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6294650ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; TITLE OF INVENTION: Peptide Nucleic Acids
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/349,532
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
```

```
/ APPLICATION NUMBER: US 08/838,545
/ FILING DATE: 09-APR-1997
/ APPLICATION NUMBER: US 08/630,019
/ FILING DATE: 09-APR-1996
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Storella, John R.
/ REGISTRATION NUMBER: 32,944
/ REFERENCE/DOCKET NUMBER: 015389-001610US
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 576-0200
/ TELEFAX: (415) 576-0300
/ INFORMATION FOR SEQ ID NO: 25:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 24 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: other nucleic acid
/ DESCRIPTION: /desc = "peptide nucleic acid (PNA),
/ DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by
/ DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via
/ DESCRIPTION: glycine amino N through a methylenecarbonyl linker"
US-09-349-532-25
```

```
Query Match 5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 52;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 41 TTTGTCTAACCTTAAGGAGG 64
| | | | | | | | | | | | | | | | | |
Db 1 TTTGTCTAACCTTAAGGAGG 24
```

```
RESULT 82
US-09-018-125-4
/ Sequence 4, Application US/09018125A
/ Patent No. 6468983
/ GENERAL INFORMATION:
/ APPLICANT: Silverman, Robert H.
/ APPLICANT: Kondo, Seiji
/ APPLICANT: Cowell, John K.
/ APPLICANT: Li, Guiying
/ APPLICANT: Torrence, Paul F.
/ TITLE OF INVENTION: RNASE L ACTIVATORS AND ANTISENSE OLIGONUCLEOTIDES
/ TITLE OF INVENTION: EFFECTIVE TO TREAT TELOMERASE-EXPRESSING MALIGNANCIES
/ FILE REFERENCE: 8656-022
/ CURRENT APPLICATION NUMBER: US/09/018,125A
/ CURRENT FILING DATE: 1999-02-03
/ EARLIER APPLICATION NUMBER: 60/044,507
/ EARLIER FILING DATE: 1997-04-21
/ NUMBER OF SEQ ID NOS: 9
/ SOFTWARE: PatentIn Ver. 2.0
/ SEQ ID NO 4
/ LENGTH: 24
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: primer
US-09-018-125-4
```

```
Query Match 5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 52;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 41 TTTGTCTAACCTTAAGGAGG 64
| | | | | | | | | | | | | | | | | |
Db 1 TTTGTCTAACCTTAAGGAGG 24
```

```
RESULT 83
US-09-018-125-5/c
/ Sequence 5, Application US/09018125A
/ Patent No. 6468983
```

```
/ GENERAL INFORMATION:
/ APPLICANT: Silverman, Robert H.
/ APPLICANT: Kondo, Seiji
/ APPLICANT: Cowell, John K.
/ APPLICANT: Li, Guiying
/ APPLICANT: Torrence, Paul F.
/ TITLE OF INVENTION: RNASE L ACTIVATORS AND ANTISENSE OLIGONUCLEOTIDES
/ TITLE OF INVENTION: EFFECTIVE TO TREAT TELOMERASE-EXPRESSING MALIGNANCIES
/ FILE REFERENCE: 8656-022
/ CURRENT APPLICATION NUMBER: US/09/018,125A
/ CURRENT FILING DATE: 1999-02-03
/ EARLIER APPLICATION NUMBER: 60/044,507
/ EARLIER FILING DATE: 1997-04-21
/ NUMBER OF SEQ ID NOS: 9
/ SOFTWARE: PatentIn Ver. 2.0
/ SEQ ID NO 5
/ LENGTH: 24
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: primer
US-09-018-125-5
```

```
Query Match 5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 52;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 423 CGTGACCCAGGACTCGGCTCACA 446
| | | | | | | | | | | | | | | | | |
Db 24 CGTGACCCAGGACTCGGCTCACA 1
```

```
RESULT 84
US-08-838-545-26
/ Sequence 26, Application US/08838545
/ Patent No. 6046307
/ GENERAL INFORMATION:
/ APPLICANT: Shay, Jerry W.
/ APPLICANT: Wright, Woodring E.
/ APPLICANT: Piatyzek, Mieczyslaw A.
/ APPLICANT: Corey, David R.
/ APPLICANT: No. 6046307ton, James C.
/ TITLE OF INVENTION: Modulation of Mammalian Telomerase by
/ TITLE OF INVENTION: Peptide Nucleic Acids
/ NUMBER OF SEQUENCES: 60
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Townsend and Townsend and Crew LLP
/ STREET: Two Embarcadero Center, Eighth Floor
/ CITY: San Francisco
/ STATE: California
/ COUNTRY: USA
/ ZIP: 94111-3834
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/838,545
/ FILING DATE: 09-APR-1997
/ CLASSIFICATION: 536
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/630,019
/ FILING DATE: 09-APR-1996
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Storella, John R.
/ REGISTRATION NUMBER: 32,944
/ REFERENCE/DOCKET NUMBER: 015389-001610US
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 576-0200
/ TELEFAX: (415) 576-0300
/ INFORMATION FOR SEQ ID NO: 26:
/ SEQUENCE CHARACTERISTICS:
```

LENGTH: 23 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by  
DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
DESCRIPTION: glycine amino N through a methylenecarbonyl linker"  
US-08-838-545-26

Query Match 5.1%; Score 23; DB 1; Length 23;  
Best Local Similarity 100.0%; Pred. No. 58;  
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 35 CCATTTTGTCTAACCCCTAACT 57  
|||||  
DB 1 CCATTTTGTCTAACCCCTAACT 23

RESULT 85  
US-09-349-532-26  
Sequence 26, Application US/09349532  
Patent No. 6294650  
GENERAL INFORMATION:  
APPLICANT: Shay, Jerry W.  
APPLICANT: Wright, Woodring B.  
APPLICANT: Piatyszek, Mieczyslaw A.  
APPLICANT: Corey, David R.  
APPLICANT: No. 6294650on, James C.  
TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
NUMBER OF SEQUENCES: 60  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/349,532  
FILING DATE:

CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/838,545  
FILING DATE: 09-APR-1997  
APPLICATION NUMBER: US 08/630,019  
FILING DATE: 09-APR-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-001610US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 26:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 23 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear

MOLECULE TYPE: other nucleic acid  
DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by  
DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
DESCRIPTION: glycine amino N through a methylenecarbonyl linker"  
US-09-349-532-26

Query Match 5.1%; Score 23; DB 1; Length 23;  
Best Local Similarity 100.0%; Pred. No. 58;  
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 35 CCATTTTGTCTAACCCCTAACT 57  
|||||  
DB 1 CCATTTTGTCTAACCCCTAACT 23

RESULT 86  
US-08-485-778-20  
Sequence 20, Application US/08485778  
Patent No. 5878979  
GENERAL INFORMATION:  
APPLICANT: Andrews, William H.  
APPLICANT: Avilion, Ariel Athena  
APPLICANT: Feng, Junli  
APPLICANT: Funk, Walter  
APPLICANT: Greider, Carol  
APPLICANT: Mathuenda, Maria Antonia Blasco  
APPLICANT: Villeponteau, Bryant  
TITLE OF INVENTION: RNA COMPONENT OF TELOMERASE  
NUMBER OF SEQUENCES: 45  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.  
STREET: Two Militia Drive  
CITY: Lexington  
STATE: MA  
COUNTRY: US  
ZIP: 02173

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/485,778  
FILING DATE: 07-JE-1995  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/387,524  
FILING DATE: 13-FEB-1995

PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/330,123  
FILING DATE: 27-OCT-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/272,102  
FILING DATE: 07-JUL-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: Granahan, Patricia  
REGISTRATION NUMBER: 32,227  
REFERENCE/DOCKET NUMBER: CSHL94-05A4  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617-861-6240  
TELEFAX: 617-861-9540

INFORMATION FOR SEQ ID NO: 20:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 27 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-485-778-20

Query Match 5.1%; Score 23; DB 1; Length 27;  
Best Local Similarity 100.0%; Pred. No. 70;  
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 22 GGAGGGGTGGTGGCCATTTTGG 44  
|||||  
DB 5 GGAGGGGTGGTGGCCATTTTGG 27

## RESULT 87

```

; US-08-520-550A-20
; Sequence 20, Application US/08520550A
; Patent No. 6013468
; GENERAL INFORMATION:
; APPLICANT: Andrews, William H.
; APPLICANT: Avillion, Ariel A.
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Greider, Carol
; APPLICANT: Marhuenda, Maria A. B.
; APPLICANT: Villeponteau, Bryant
; TITLE OF INVENTION: RNA Component of Telomerase
; NUMBER OF SEQUENCES: 47
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: MA
; COUNTRY: US
; ZIP: 02173
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,550A
; FILING DATE: 29-AUG-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/387,524
; FILING DATE: 13-FEB-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Granahan, Patricia
; REGISTRATION NUMBER: 32,227
; REFERENCE/DOCKET NUMBER: CSHL94-05A3B
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 20:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 27 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-520-550A-20

```

```

Query Match 5.1%; Score 23; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 70;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy 22 GGAGGGGTGGTGGCCATTTTTG 44
Db 5 GGAGGGGTGGTGGCCATTTTTG 27

```

## RESULT 88

```

; US-08-330-123A-5/c
; Sequence 5, Application US/08330123A
; Patent No. 5583016
; GENERAL INFORMATION:
; APPLICANT: VILLEPONTEAU, Bryant
; APPLICANT: FENG, Junli
; APPLICANT: FUNK, Walter
; APPLICANT: ANDREWS, William H.
; TITLE OF INVENTION: HUMAN TELOMERASE

```

```

; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend Khourie and Crew
; STREET: 379 Lytton Avenue
; CITY: Palo Alto
; STATE: California
; COUNTRY: US
; ZIP: 94301
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/330,123A
; FILING DATE: 27-OCT-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 15389-000810
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 326-2400
; TELEFAX: (415) 326-2422
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: RNA
; US-08-330-123A-5

```

```

Query Match 4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy 46 CTAACCTTAAGTGAAGGGCG 67
Db 22 CTAACCTTAAGTGAAGGGCG 1

```

## RESULT 89

```

; US-08-330-123A-6/c
; Sequence 6, Application US/08330123A
; Patent No. 5583016
; GENERAL INFORMATION:
; APPLICANT: VILLEPONTEAU, Bryant
; APPLICANT: FENG, Junli
; APPLICANT: FUNK, Walter
; APPLICANT: ANDREWS, William H.
; TITLE OF INVENTION: HUMAN TELOMERASE
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend Khourie and Crew
; STREET: 379 Lytton Avenue
; CITY: Palo Alto
; STATE: California
; COUNTRY: US
; ZIP: 94301
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/330,123A
; FILING DATE: 27-OCT-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:

```

```
/ APPLICATION NUMBER: US 08/272,102
/ FILING DATE: 07-JUL-1994
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Smith, William M
/ REGISTRATION NUMBER: 30,223
/ REFERENCE/DOCKET NUMBER: 15389-000810
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 576-2400
/ TELEFAX: (415) 576-2422
/ INFORMATION FOR SEQ ID NO: 6:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 22 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: RNA
US-08-330-123A-6

Query Match 4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 54 AACTGAGAGGGCGTAGCGCC 75
Db 22 AACTGAGAGGGCGTAGCGCC 1

RESULT 90
US-08-482-115B-32/c
/ Sequence 32, Application US/08482115B
/ Patent No. 5776579
/ GENERAL INFORMATION:
/ APPLICANT: Villeponteau, Bryant
/ APPLICANT: Feng, Junli
/ APPLICANT: Funk, Walter
/ APPLICANT: Andrews, William H.
/ TITLE OF INVENTION: Assays for the RNA Component of Human
/ TITLE OF INVENTION: Telomerase
/ NUMBER OF SEQUENCES: 40
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Townsend and Townsend and Crew LLP
/ STREET: Two Embarcadero Center, Eighth Floor
/ CITY: San Francisco
/ STATE: California
/ COUNTRY: USA
/ ZIP: 94111-3834
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/482,115B
/ FILING DATE: 07-JUN-1995
/ CLASSIFICATION: 435
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/272,102
/ FILING DATE: 07-JUL-1994
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/330,123
/ FILING DATE: 27-OCT-1994
/ NAME: Storella, John R.
/ REGISTRATION NUMBER: 32,944
/ REFERENCE/DOCKET NUMBER: 015389-000830US
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 576-0300
/ TELEFAX: (415) 576-0300
/ INFORMATION FOR SEQ ID NO: 32:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 22 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
```

```
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA
US-08-482-115B-32

Query Match 4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 183 CTGCTGGCCGCTTCGCCCTCC 204
Db 22 CTGCTGGCCGCTTCGCCCTCC 1

RESULT 91
US-08-660-678A-27/c
/ Sequence 27, Application US/08660678A
/ Patent No. 5837857
/ GENERAL INFORMATION:
/ APPLICANT: Villeponteau, Bryant
/ APPLICANT: Feng, Junli
/ APPLICANT: Funk, Walter
/ APPLICANT: Andrews, William H.
/ TITLE OF INVENTION: Mammalian Telomerase
/ NUMBER OF SEQUENCES: 30
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Townsend and Townsend and Crew LLP
/ STREET: Two Embarcadero Center, Eighth Floor
/ CITY: San Francisco
/ STATE: California
/ COUNTRY: USA
/ ZIP: 94111-3834
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/660,678A
/ FILING DATE: 05-JUN-1996
/ CLASSIFICATION: 435
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/330,123
/ FILING DATE: 27-OCT-1994
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/272,102
/ FILING DATE: 07-JUL-1994
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Storella, John R.
/ REGISTRATION NUMBER: 32,944
/ REFERENCE/DOCKET NUMBER: 015389-000811US
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 576-0200
/ TELEFAX: (415) 576-0300
/ INFORMATION FOR SEQ ID NO: 27:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 22 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA
US-08-660-678A-27

Query Match 4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTACTGAGAGGGCG 67
Db 22 CTAACCCCTACTGAGAGGGCG 1

RESULT 92
US-08-660-678A-28/c
```

; Sequence 28, Application US/08660678A  
; Patent No. 5837857  
; GENERAL INFORMATION:  
; APPLICANT: Villeponteau, Bryant  
; APPLICANT: Feng, Junli  
; APPLICANT: Funk, Walter  
; APPLICANT: Andrews, William H.  
; TITLE OF INVENTION: Mammalian Telomerase  
; NUMBER OF SEQUENCES: 30  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/660,678A  
; FILING DATE: 05-JUN-1996  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/330,123  
; FILING DATE: 27-OCT-1994  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/272,102  
; FILING DATE: 07-JUL-1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-000811US  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 28:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 22 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
US-08-660-678A-28

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 66;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 54 AACTGAGAGGGCGTAGGCGCC 75  
Db 22 AACTGAGAGGGCGTAGGCGCC 1

RESULT 93  
US-08-485-778-7/c  
; Sequence 7, Application US/08485778  
; Patent No. 5876979  
; GENERAL INFORMATION:  
; APPLICANT: Andrews, William H.  
; APPLICANT: Avillion, Ariel Athena  
; APPLICANT: Feng, Junli  
; APPLICANT: Funk, Walter  
; APPLICANT: Greider, Carol  
; APPLICANT: Marhuenda, Maria Antonia Blasco  
; APPLICANT: Villeponteau, Bryant  
; TITLE OF INVENTION: RNA COMPONENT OF TELOMERASE  
; NUMBER OF SEQUENCES: 45  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.  
; STREET: Two Militia Drive

; CITY: Lexington  
; STATE: MA  
; COUNTRY: US  
; ZIP: 02173  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/485,778  
; FILING DATE: 07-JE-1995  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/387,524  
; FILING DATE: 13-FEB-1995  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/330,123  
; FILING DATE: 27-OCT-1994  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/272,102  
; FILING DATE: 07-JUL-1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Granahan, Patricia  
; REGISTRATION NUMBER: 32,227  
; REFERENCE/DOCKET NUMBER: CSHL94-05A4  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 617-861-6240  
; TELEFAX: 617-861-9540  
; INFORMATION FOR SEQ ID NO: 7:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 22 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-08-485-778-7

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 66;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAAGGCG 67  
Db 22 CTAACCCCTAACTGAGAAGGCG 1

RESULT 94  
US-08-485-778-8/c  
; Sequence 8, Application US/08485778  
; Patent No. 5876979  
; GENERAL INFORMATION:  
; APPLICANT: Andrews, William H.  
; APPLICANT: Avillion, Ariel Athena  
; APPLICANT: Feng, Junli  
; APPLICANT: Funk, Walter  
; APPLICANT: Greider, Carol  
; APPLICANT: Marhuenda, Maria Antonia Blasco  
; APPLICANT: Villeponteau, Bryant  
; TITLE OF INVENTION: RNA COMPONENT OF TELOMERASE  
; NUMBER OF SEQUENCES: 45  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.  
; STREET: Two Militia Drive  
; CITY: Lexington  
; STATE: MA  
; COUNTRY: US  
; ZIP: 02173  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:

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; APPLICATION NUMBER: US/08/485,778
; FILING DATE: 07-JE-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/387,524
; FILING DATE: 13-FEB-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Granahan, Patricia
; REGISTRATION NUMBER: 32,227
; REFERENCE/DOCKET NUMBER: CSHL94-05A4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 8:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-485-778-8

Query Match          4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 54 AACTGAGAAGCGCTAGCGCC 75
Db 22 AACTGAGAAGCGCTAGCGCC 1

RESULT 95
US-08-472-802C-37/c
; Sequence 37, Application US/08472802C
; Patent No. 5958680
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 44
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,802C
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M.
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 15389-000820
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 42:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: RNA
; US-08-472-802C-42

Query Match          4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGCG 67
Db 22 CTAACCCCTAACTGAGAGGCG 1
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```

; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 37:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-08-472-802C-37

Query Match          4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 183 CTGCTGGCCGCTTCGCCCTCC 204
Db 22 CTGCTGGCCGCTTCGCCCTCC 1

RESULT 96
US-08-472-802C-42/c
; Sequence 42, Application US/08472802C
; Patent No. 5958680
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 44
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/472,802C
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M.
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 15389-000820
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 42:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: RNA
; US-08-472-802C-42

Query Match          4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGCG 67
Db 22 CTAACCCCTAACTGAGAGGCG 1
```

```
Db      22 CTAACCCCTAAGGAGGGCG 1
|||||
TITLE OF INVENTION: RNA Component of Telomerase
NUMBER OF SEQUENCES: 47
CORRESPONDENCE ADDRESS:
ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
STREET: Two Militia Drive
CITY: Lexington
STATE: MA
COUNTRY: US
ZIP: 02173
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
TITLE OF INVENTION: Mammalian Telomerase
NUMBER OF SEQUENCES: 44
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/472,802C
FILING DATE: 07-JUN-1995
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/272,102
FILING DATE: 07-JUL-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/330,123
FILING DATE: 27-OCT-1994
ATTORNEY/AGENT INFORMATION:
NAME: Smith, William M.
REGISTRATION NUMBER: 30,223
REFERENCE/DOCKET NUMBER: 15389-000820
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0300
TELEFAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 43:
SEQUENCE CHARACTERISTICS:
LENGTH: 22 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: RNA
US-08-472-802C-43

Query Match 4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 54 AACTGAGAGGGCGTAGGGCGCC 75
Db 22 AACTGAGAGGGCGTAGGGCGCC 1
|||||
RESULT 98
US-08-520-550A-7/c
Sequence 7, Application US/08520550A
Patent No. 6013468
GENERAL INFORMATION:
APPLICANT: Andrews, William H.
APPLICANT: Avilion, Ariel A.
APPLICANT: Feng, Junli
APPLICANT: Greider, Carol
APPLICANT: Marhuenda, Maria A. B.
APPLICANT: Villeponteau, Bryant
TITLE OF INVENTION: RNA Component of Telomerase
NUMBER OF SEQUENCES: 47
CORRESPONDENCE ADDRESS:
ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
STREET: Two Militia Drive
CITY: Lexington
STATE: MA
COUNTRY: US
ZIP: 02173
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/520,550A
FILING DATE: 29-AUG-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/387,524
FILING DATE: 13-FEB-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/330,123
FILING DATE: 27-OCT-1994
ATTORNEY/AGENT INFORMATION:
NAME: Granahan, Patricia
REGISTRATION NUMBER: 32,227
REFERENCE/DOCKET NUMBER: CSHL94-05A3B
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-861-6240
TELEFAX: 617-861-9540
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 22 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-520-550A-7

Query Match 4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAAGGAGGGCG 67
Db 22 CTAACCCCTAAGGAGGGCG 1
|||||
RESULT 99
US-08-520-550A-8/c
Sequence 8, Application US/08520550A
Patent No. 6013468
GENERAL INFORMATION:
APPLICANT: Andrews, William H.
APPLICANT: Avilion, Ariel A.
APPLICANT: Feng, Junli
APPLICANT: Greider, Carol
APPLICANT: Marhuenda, Maria A. B.
APPLICANT: Villeponteau, Bryant
TITLE OF INVENTION: RNA Component of Telomerase
NUMBER OF SEQUENCES: 47
CORRESPONDENCE ADDRESS:
ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
STREET: Two Militia Drive
CITY: Lexington
STATE: MA
COUNTRY: US
ZIP: 02173
COMPUTER READABLE FORM:
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; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,550A
; FILING DATE: 29-AUG-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/387,524
; FILING DATE: 13-FEB-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Granahan, Patricia
; REGISTRATION NUMBER: 32,227
; REFERENCE/DOCKET NUMBER: CSHL94-05A3B
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 8:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-520-550A-8

Query Match 4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 54 AACTGAGAGCGCGTAGCGCC 75
Db 22 AACTGAGAGCGCGTAGCGCC 1

RESULT 100
US-08-998-443-27/c
; Sequence 27, Application US/08998443
; Patent No. 6054575
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/998,443
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,678
; FILING DATE: 05-JUN-1996
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000811US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0300
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 28:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs

; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,550A
; FILING DATE: 29-AUG-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/387,524
; FILING DATE: 13-FEB-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Granahan, Patricia
; REGISTRATION NUMBER: 32,227
; REFERENCE/DOCKET NUMBER: CSHL94-05A3B
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 8:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-520-550A-8

Query Match 4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGCG 67
Db 22 CTAACCCCTAACTGAGAGGCG 1

RESULT 101
US-08-998-443-28/c
; Sequence 28, Application US/08998443
; Patent No. 6054575
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/998,443
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,678
; FILING DATE: 05-JUN-1996
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000811US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0300
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 28:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
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; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-998-443-28

Query Match          4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 54 AACTGAGAAGCGCGTAGCGCC 75
Db 22 AACTGAGAAGCGCGTAGCGCC 1

RESULT 102
US-09-580-517-5/c
; Sequence 5, Application US/09580517
; Patent No. 6320039
; GENERAL INFORMATION:
; APPLICANT: VILLEPONTEAU, Bryant
; FENG, Junli
; FUNK, Walter
; ANDREWS, William H.
; TITLE OF INVENTION: HUMAN TELOMERASE
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend Khourie and Crew
; STREET: 379 Lytton Avenue
; CITY: Palo Alto
; STATE: California
; COUNTRY: US
; ZIP: 94301
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/580,517
; FILING DATE: 25-May-2000
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/330,123
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 15389-000810
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 326-2400
; TELEFAX: (415) 326-2422
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: RNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 6:
US-09-580-517-6

Query Match          4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 54 AACTGAGAAGCGCGTAGCGCC 75
Db 22 AACTGAGAAGCGCGTAGCGCC 1

RESULT 104
US-09-717-828B-2/c
; Sequence 2, Application US/09717828B
; Patent No. 6517834
; GENERAL INFORMATION:
; APPLICANT: Weinrich, Scott L
; APPLICANT: Atkinson III, Edward M
; APPLICANT: Lichtsteiner, Serge P
; APPLICANT: Vasserot, Alain P
; APPLICANT: Pruzan, Ronald A
; TITLE OF INVENTION: A Method for Purifying Telomerase
; FILE REFERENCE: Purifiedtelomerase011base
; CURRENT APPLICATION NUMBER: US/09/717,828B
; CURRENT FILING DATE: 2000-11-20
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 08/833,377
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 08/510,736
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; PRIOR FILING DATE: 1995-08-04
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: Patent In Ver. 2.1 edited
; SEQ ID NO 2
; LENGTH: 22
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)
; OTHER INFORMATION: Biotin 5'-terminal
; OTHER INFORMATION: Description of Artificial Sequence: Affinity Agent
US-09-717-828B-2

Query Match          4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGGCG 67
Db 22 CTAACCCCTAACTGAGAGGGCG 1

RESULT 105
US-09-717-829A-2/c
; Sequence 2, Application US/09717829A
; Patent No. 6545133
; GENERAL INFORMATION:
; APPLICANT: Weinrich, Scott L
; APPLICANT: Atkinson III, Edward M
; APPLICANT: Lichtshteiner, Serge P
; APPLICANT: Vaeserot, Alain P
; APPLICANT: Pruzan, Ronald A
; TITLE OF INVENTION: A Method for Purifying Telomerase
; FILE REFERENCE: PurifiedTelomerase01base
; CURRENT APPLICATION NUMBER: US/09717,829A
; CURRENT FILING DATE: 2000-11-20
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 08/833,377
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 08/510,736
; PRIOR FILING DATE: 1995-08-04
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: Patent In Ver. 2.1 edited
; SEQ ID NO 2
; LENGTH: 22
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)
; OTHER INFORMATION: Biotin 5'-terminal
; OTHER INFORMATION: Description of Artificial Sequence: Affinity Agent
US-09-717-829A-2

Query Match          4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGGCG 67
Db 22 CTAACCCCTAACTGAGAGGGCG 1

RESULT 106
US-09-057-351-41/c
; Sequence 41, Application US/09057351
; Patent No. 6548298
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Funk, Junli
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
```

```
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,802
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000821US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 41:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: RNA
US-09-057-351-41

Query Match          4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 66;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAGGGCG 67
Db 22 CTAACCCCTAACTGAGAGGGCG 1

RESULT 107
US-09-057-351-42/c
; Sequence 42, Application US/09057351
; Patent No. 6548298
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Funk, Junli
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
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COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/057,351  
FILING DATE: 08-APR-1994  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/272,102  
FILING DATE: 07-JUL-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/330,123  
FILING DATE: 27-OCT-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/472,802  
FILING DATE: 07-JUN-1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-000821US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 42:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 22 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: RNA  
US-09-057-351-42

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 66;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 54 AACTGAGAGGGCGGTAGCGCC 75  
Db 22 AACTGAGAGGGCGGTAGCGCC 1

RESULT 108  
US-10-330-872-2/c  
Sequence 2, Application US/10330872  
Patent No. 6787133  
GENERAL INFORMATION:  
APPLICANT: Geron Corporation  
APPLICANT: Weinrich, Scott  
APPLICANT: Atkinson III, Edward  
APPLICANT: Lichtsteiner, Serge  
APPLICANT: Vasserot, Alain  
APPLICANT: Pruzan, Ronald  
TITLE OF INVENTION: Using Purified Telomerase to Identify Telomerase Activators and  
FILE REFERENCE: 011/006C  
CURRENT APPLICATION NUMBER: US/10/330,872  
CURRENT FILING DATE: 2002-12-24  
PRIOR APPLICATION NUMBER: 08/510,736  
PRIOR FILING DATE: 1995-08-04  
PRIOR APPLICATION NUMBER: 08/833,377  
PRIOR FILING DATE: 1997-04-04  
PRIOR APPLICATION NUMBER: 09/420,056  
PRIOR FILING DATE: 1999-10-18  
PRIOR APPLICATION NUMBER: 09/717,828  
PRIOR FILING DATE: 2000-11-20  
NUMBER OF SEQ ID NOS: 11  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 2  
LENGTH: 22  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-10-330-872-2

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 66;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAACTGAGAGGGCG 67  
Db 22 CTAACCCCTAACTGAGAGGGCG 1

RESULT 109  
US-08-330-123A-25/c  
Sequence 25, Application US/08330123A  
Patent No. 5583016  
GENERAL INFORMATION:  
APPLICANT: VILLEPONTEAU, Bryant  
APPLICANT: FENG, Junli  
APPLICANT: FUNK, Walter  
TITLE OF INVENTION: HUMAN TELOMERASE  
NUMBER OF SEQUENCES: 25  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend Khourie and Crew  
STREET: 379 Lytton Avenue  
CITY: Palo Alto  
STATE: California  
COUNTRY: US  
ZIP: 94301  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/330,123A  
FILING DATE: 27-OCT-1994  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/272,102  
FILING DATE: 07-JUL-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: Smith, William M  
REGISTRATION NUMBER: 30,223  
REFERENCE/DOCKET NUMBER: 15389-000810  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 326-2400  
TELEFAX: (415) 326-2422  
INFORMATION FOR SEQ ID NO: 25:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 21 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA  
US-08-330-123A-25

Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 74;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 184 TGCTGGCCGCTTCGCCCTCC 204  
Db 21 TGCTGGCCGCTTCGCCCTCC 1

RESULT 110  
US-08-482-115B-25/c  
Sequence 25, Application US/08482115B  
Patent No. 5776679  
GENERAL INFORMATION:  
APPLICANT: Villeponteau, Bryant  
APPLICANT: Feng, Junli  
APPLICANT: Funk, Walter  
APPLICANT: Andrews, William H.

;; TITLE OF INVENTION: Assays for the RNA Component of Human  
;; TITLE OF INVENTION: Telomerase  
;; NUMBER OF SEQUENCES: 40  
;; CORRESPONDENCE ADDRESS:  
;; ADDRESSEE: Townsend and Townsend and Crew LLP  
;; STREET: Two Embarcadero Center, Eighth Floor  
;; CITY: San Francisco  
;; STATE: California  
;; COUNTRY: USA  
;; ZIP: 94111-3834  
;; COMPUTER READABLE FORM:  
;; MEDIUM TYPE: Floppy disk  
;; COMPUTER: IBM PC compatible  
;; OPERATING SYSTEM: PC-DOS/MS-DOS  
;; SOFTWARE: Patentin Release #1.0, Version #1.30  
;; CURRENT APPLICATION DATA:  
;; APPLICATION NUMBER: US/08/482,115B  
;; FILING DATE: 07-JUN-1995  
;; CLASSIFICATION: 435  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: US 08/272,102  
;; FILING DATE: 07-JUL-1994  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: US 08/330,123  
;; FILING DATE: 27-OCT-1994  
;; ATTORNEY/AGENT INFORMATION:  
;; NAME: Storella, John R.  
;; REGISTRATION NUMBER: 32,944  
;; REFERENCE/DOCKET NUMBER: 015389-000830US  
;; TELECOMMUNICATION INFORMATION:  
;; TELEPHONE: (415) 576-0300  
;; TELEFAX: (415) 576-0300  
;; INFORMATION FOR SEQ ID NO: 25:  
;; SEQUENCE CHARACTERISTICS:  
;; LENGTH: 21 base pairs  
;; TYPE: nucleic acid  
;; STRANDEDNESS: single  
;; TOPOLOGY: linear  
;; MOLECULE TYPE: DNA  
US-08-482-115B-25

Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 74;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 184 TGCTGGCCCGTTCGCCCTCC 204  
|||  
Db 21 TGCTGGCCCGTTCGCCCTCC 1

RESULT 111  
US-08-660-678A-25/c  
; Sequence 25, Application US/08660678A  
; Patent No. 5837857  
; GENERAL INFORMATION:  
; APPLICANT: Villeponteau, Bryant  
; APPLICANT: Feng, Junli  
; APPLICANT: Funk, Walter  
; APPLICANT: Andrews, William H.  
; TITLE OF INVENTION: Mammalian Telomerase  
; NUMBER OF SEQUENCES: 30  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.30

;; CURRENT APPLICATION DATA:  
;; APPLICATION NUMBER: US/08/660,678A  
;; FILING DATE: 05-JUN-1996  
;; CLASSIFICATION: 435  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: US 08/330,123  
;; FILING DATE: 27-OCT-1994  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: US 08/272,102  
;; FILING DATE: 07-JUL-1994  
;; ATTORNEY/AGENT INFORMATION:  
;; NAME: Storella, John R.  
;; REGISTRATION NUMBER: 32,944  
;; REFERENCE/DOCKET NUMBER: 015389-000811US  
;; TELECOMMUNICATION INFORMATION:  
;; TELEPHONE: (415) 576-0200  
;; TELEFAX: (415) 576-0300  
;; INFORMATION FOR SEQ ID NO: 25:  
;; SEQUENCE CHARACTERISTICS:  
;; LENGTH: 21 base pairs  
;; TYPE: nucleic acid  
;; STRANDEDNESS: single  
;; TOPOLOGY: linear  
;; MOLECULE TYPE: DNA  
US-08-660-678A-25

Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 74;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 184 TGCTGGCCCGTTCGCCCTCC 204  
|||  
Db 21 TGCTGGCCCGTTCGCCCTCC 1

RESULT 112  
US-08-485-778-33/c  
; Sequence 33, Application US/08485778  
; Patent No. 5876979  
; GENERAL INFORMATION:  
; APPLICANT: Andrews, William H.  
; APPLICANT: Avilion, Ariel Athena  
; APPLICANT: Feng, Junli  
; APPLICANT: Funk, Walter  
; APPLICANT: Greider, Carol  
; APPLICANT: Marhuenda, Maria Antonia Blasco  
; APPLICANT: Villeponteau, Bryant  
; TITLE OF INVENTION: RNA COMPONENT OF TELOMERASE  
; NUMBER OF SEQUENCES: 45  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.  
; STREET: Two Militia Drive  
; CITY: Lexington  
; STATE: MA  
; COUNTRY: US  
; ZIP: 02173  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/485,778  
; FILING DATE: 07-JE-1995  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/387,524  
; FILING DATE: 13-FEB-1995  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/330,123  
; FILING DATE: 27-OCT-1994  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/272,102

; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Granahan, Patricia
; REGISTRATION NUMBER: 32,227
; REFERENCE/DOCKET NUMBER: CSHL94-05A4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 33:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-485-778-33

Query Match
Best Local Similarity 4.7%; Score 21; DB 1; Length 21;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 184 TGCTGGCCCGTTGCGCCCTCC 204
Db 21 TGCTGGCCCGTTGCGCCCTCC 1

RESULT 113
US-08-472-802C-26/c
; Sequence 26, Application US/08472802C
; Patent No. 5958680
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 44
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/472,802C
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M.
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 15389-000820
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 26:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-08-472-802C-26

Query Match
Best Local Similarity 4.7%; Score 21; DB 1; Length 21;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 184 TGCTGGCCCGTTGCGCCCTCC 204
Db 21 TGCTGGCCCGTTGCGCCCTCC 1

RESULT 114
US-08-520-550A-33/c
; Sequence 33, Application US/08520550A
; Patent No. 6013468
; GENERAL INFORMATION:
; APPLICANT: Andrews, William H.
; APPLICANT: Avilion, Ariel A.
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Greider, Carol
; APPLICANT: Marhuenda, Maria A. B.
; APPLICANT: Villeponteau, Bryant
; TITLE OF INVENTION: RNA Component of Telomerase
; NUMBER OF SEQUENCES: 47
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
; STREET: Two Militia Drive
; CITY: Lexington
; STATE: MA
; COUNTRY: US
; ZIP: 02173
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,550A
; FILING DATE: 29-AUG-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/387,524
; FILING DATE: 13-FEB-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Granahan, Patricia
; REGISTRATION NUMBER: 32,227
; REFERENCE/DOCKET NUMBER: CSHL94-05A3B
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-861-6240
; TELEFAX: 617-861-9540
; INFORMATION FOR SEQ ID NO: 33:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-520-550A-33

Query Match
Best Local Similarity 4.7%; Score 21; DB 1; Length 21;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 184 TGCTGGCCCGTTGCGCCCTCC 204
Db 21 TGCTGGCCCGTTGCGCCCTCC 1

US-08-998-443-25/c  
; Sequence 25, Application US/08998443  
; Patent No. 6054575  
; GENERAL INFORMATION:  
; APPLICANT: Villeponteau, Bryant  
; APPLICANT: Feng, Junli  
; APPLICANT: Funk, Walter  
; APPLICANT: Andrews, William H.  
; TITLE OF INVENTION: Mammalian Telomerase  
; NUMBER OF SEQUENCES: 30  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/998,443  
; FILING DATE: 27-OCT-1994  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US/08/660,678  
; FILING DATE: 05-JUN-1996  
; APPLICATION NUMBER: US/08/330,123  
; FILING DATE: 27-OCT-1994  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US/08/272,102  
; FILING DATE: 07-JUL-1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-000811US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 25:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 21 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
US-08-998-443-25

Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 74;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 184 TGCTGGCCCGTTGCGCCCTCC 204  
Db 21 TGCTGGCCCGTTGCGCCCTCC 1

RESULT 116  
US-09-060-523-25/c  
; Sequence 25, Application US/09060523  
; Patent No. 6258535  
; GENERAL INFORMATION:  
; APPLICANT: Villeponteau, Bryant  
; APPLICANT: Feng, Junli  
; APPLICANT: Funk, Walter  
; APPLICANT: Andrews, William H.  
; TITLE OF INVENTION: Mammalian Telomerase  
; NUMBER OF SEQUENCES: 25  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor

CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/060,523  
FILING DATE: 14-APR-1998  
CLASSIFICATION: 536  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/660,678  
FILING DATE: 05-JUN-1996  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/330,123  
FILING DATE: 27-OCT-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/272,102  
FILING DATE: 07-JUL-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-000813US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 25:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 21 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA  
US-09-060-523-25

Query Match 4.7%; Score 21; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 74;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 184 TGCTGGCCCGTTGCGCCCTCC 204  
Db 21 TGCTGGCCCGTTGCGCCCTCC 1

RESULT 117  
US-09-580-517-25/c  
; Sequence 25, Application US/09580517  
; Patent No. 6320039  
; GENERAL INFORMATION:  
; APPLICANT: VILLEPONTEAU, Bryant  
; FENG, Junli  
; FUNK, Walter  
; ANDREWS, William H.  
; TITLE OF INVENTION: HUMAN TELOMERASE  
; NUMBER OF SEQUENCES: 25  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend Khourie and Crew  
; STREET: 379 Lytton Avenue  
; CITY: Palo Alto  
; STATE: California  
; COUNTRY: US  
; ZIP: 94301  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/580,517  
; FILING DATE: 25-May-2000

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;
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/330,123
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 15389-000810
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 326-2400
; TELEFAX: (415) 326-2422
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 25:
US-09-580-517-25

Query Match          4.7%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 74;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      184 TGCTGGCCCGTTCGCCCTCC 204
Db      21 TGCTGGCCCGTTCGCCCTCC 1

RESULT 118
US-09-057-351-25/c
; Sequence 25, Application US/09057351
; Patent No. 6548298
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; FILING DATE: 07-JUL-1994
; APPLICATION NUMBER: US 08/272,102
; PRIOR APPLICATION DATA:
; FILING DATE: 27-OCT-1994
; APPLICATION NUMBER: US 08/330,123
; PRIOR APPLICATION DATA:
; FILING DATE: 07-JUN-1995
; APPLICATION NUMBER: US 08/472,802
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000821US
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
```

```
;
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-09-057-351-25

Query Match          4.7%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 74;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      184 TGCTGGCCCGTTCGCCCTCC 204
Db      21 TGCTGGCCCGTTCGCCCTCC 1

RESULT 119
US-08-833-377-3/c
; Sequence 3, Application US/08833377
; Patent No. 5968506
; GENERAL INFORMATION:
; APPLICANT: Weinrich, Scott L.
; APPLICANT: Atkinson III, Edward M.
; APPLICANT: Lichtsteiner, Serge P.
; APPLICANT: Vasserot, Alain P.
; APPLICANT: Pruzan, Ronald A.
; APPLICANT: Kealey, James T.
; TITLE OF INVENTION: Purified Telomerase
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/833,377
; FILING DATE: 04-APR-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/510,736
; FILING DATE: 04-AUG-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001110US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: 1
; OTHER INFORMATION: /mod_base= OTHER
; OTHER INFORMATION: /note= "N = 5' biotinylated cytidine"
; FEATURE:
; NAME/KEY: -
; LOCATION: 1..22
; OTHER INFORMATION: /note= "oligonucleotide P3"
```



US-08-833-377-3

Query Match 4.7%; Score 21; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 78;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 46 CTAACCCCTAACTGAGAGGCC 66  
Db 22 CTAACCCCTAACTGAGAGGCC 2

RESULT 120

US-08-330-123A-4/c  
; Sequence 4, Application US/08330123A  
; Patent No. 5583016  
; GENERAL INFORMATION:  
; APPLICANT: VILLEPONTEAU, Bryant  
; APPLICANT: FENG, Junli  
; APPLICANT: FUNK, Walter  
; APPLICANT: ANDREWS, William H.  
; TITLE OF INVENTION: HUMAN TELOMERASE  
; NUMBER OF SEQUENCES: 25  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend Khourie and Crew  
; STREET: 379 Lytton Avenue  
; CITY: Palo Alto  
; STATE: California  
; COUNTRY: US  
; ZIP: 94301

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/330,123A  
FILING DATE: 27-OCT-1994  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/272,102  
FILING DATE: 07-JUL-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: Smith, William M  
REGISTRATION NUMBER: 30,223  
REFERENCE/DOCKET NUMBER: 15389-000810  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 326-2400  
TELEFAX: (415) 326-2422  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: RNA

US-08-330-123A-4

Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 83;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 41 TTTGTCTAACCTTAACCTGAG 60  
Db 20 TTTGTCTAACCTTAACCTGAG 1

RESULT 121

US-08-330-123A-7/c  
; Sequence 7, Application US/08330123A  
; Patent No. 5583016  
; GENERAL INFORMATION:  
; APPLICANT: VILLEPONTEAU, Bryant  
; APPLICANT: FENG, Junli

; APPLICANT: FUNK, Walter  
; APPLICANT: ANDREWS, William H.  
; TITLE OF INVENTION: HUMAN TELOMERASE  
; NUMBER OF SEQUENCES: 25  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend Khourie and Crew  
; STREET: 379 Lytton Avenue  
; CITY: Palo Alto  
; STATE: California  
; COUNTRY: US  
; ZIP: 94301

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/330,123A  
FILING DATE: 27-OCT-1994  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/272,102  
FILING DATE: 07-JUL-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: Smith, William M  
REGISTRATION NUMBER: 30,223  
REFERENCE/DOCKET NUMBER: 15389-000810  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 326-2400  
TELEFAX: (415) 326-2422  
INFORMATION FOR SEQ ID NO: 7:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA

Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 83;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 2 GGTTCGGAGGCTGGCCTG 21  
Db 20 GGTTCGGAGGCTGGCCTG 1

RESULT 122

US-08-482-115B-7/c  
; Sequence 7, Application US/08482115B  
; Patent No. 5776679  
; GENERAL INFORMATION:  
; APPLICANT: Villeponteau, Bryant  
; APPLICANT: Feng, Junli  
; APPLICANT: Funk, Walter  
; APPLICANT: Andrews, William H.  
; TITLE OF INVENTION: Assays for the RNA Component of Human  
; TITLE OF INVENTION: Telomerase  
; NUMBER OF SEQUENCES: 40  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:

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; APPLICATION NUMBER: US/08/482,115B
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000830US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0300
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-08-482-115B-7

Query Match          4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2 GGTTCGGAGGGTGGGCGCTG 21
Db      20 GGTTCGGAGGGTGGGCGCTG 1

RESULT 123
US-08-660-678A-7/c
; Sequence 7, Application US/08660678A
; Patent No. 5837857
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,678A
; FILING DATE: 05-JUN-1996
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,678A
; FILING DATE: 05-JUN-1996
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000811US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
```

```
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-08-660-678A-7

Query Match          4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2 GGTTCGGAGGGTGGGCGCTG 21
Db      20 GGTTCGGAGGGTGGGCGCTG 1

RESULT 124
US-08-660-678A-26/c
; Sequence 26, Application US/08660678A
; Patent No. 5837857
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,678A
; FILING DATE: 05-JUN-1996
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000811US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 26:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-08-660-678A-26

Query Match          4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      41 TTGTGCTAACCCCTAACTGAG 60
```

```
Db      20 TTTGCTAAACCTTAACGAG 1
|||||
TITLE OF INVENTION: Telomerase
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP
STREET: Two Embarcadero Center, 8th Floor
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
TITLE OF INVENTION: Mammalian Telomerase
NUMBER OF SEQUENCES: 30
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,678A
FILING DATE: 05-JUN-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/330,123
FILING DATE: 27-OCT-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/272,102
FILING DATE: 07-JUL-1994
ATTORNEY/AGENT INFORMATION:
NAME: Storella, John R.
REGISTRATION NUMBER: 32,944
REFERENCE/DOCKET NUMBER: 015389-000811US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 29:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: RNA
US-08-660-678A-29

Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

RESULT 125
US-08-660-678A-29/c
; Sequence 29, Application US/08660678A
; Patent No. 5837857
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Peng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,678A
; FILING DATE: 05-JUN-1996
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000811US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: RNA
; US-08-660-678A-29

Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy      2 GGTTCGGAGGCTGGGCTG 21
|||||
TITLE OF INVENTION: Methods for Detecting the RNA Component of

Db      20 GGTTCGGAGGCTGGGCTG 1
|||||
TITLE OF INVENTION: Telomerase
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP
STREET: Two Embarcadero Center, 8th Floor
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/770,565
FILING DATE: 20-DEC-1996
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Storella, John R.
REGISTRATION NUMBER: 32,944
REFERENCE/DOCKET NUMBER: 015389-002300US
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-576-0200
TELEFAX: 415-576-0300
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA
US-08-770-565-3

Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy      361 AGCCCGCAGGAGGAGGACG 380
|||||
Db      20 AGCCCGCAGGAGGAGGACG 1
|||||
TITLE OF INVENTION: Methods for Detecting the RNA Component of

RESULT 127
US-08-770-565-6/c
; Sequence 6, Application US/08770565
; Patent No. 5846723
; GENERAL INFORMATION:
; APPLICANT: Kim, Nam Woo
; APPLICANT: Wu, Fred
; APPLICANT: Kealey, James T.
; APPLICANT: Pruzan, Ronald
; APPLICANT: Weinrich, Scott L.
; TITLE OF INVENTION: Methods for Detecting the RNA Component of
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/770,565
; FILING DATE: 20-DEC-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
```

NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-002300US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 415-576-0200  
TELEFAX: 415-576-0300  
INFORMATION FOR SEQ ID NO: 6:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA  
US-08-770-565-6

Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 83;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 300 GAAGAGTTGGCTCTGTGAC 319  
Db 20 GAAGAGTTGGCTCTGTGAC 1

## RESULT 128

US-08-770-565-7/c  
Sequence 7, Application US/08770565  
Patent No. 5846723  
GENERAL INFORMATION:  
APPLICANT: Kim, Nam Woo  
APPLICANT: Wu, Fred  
APPLICANT: Kealey, James T.  
APPLICANT: Pruzan, Ronald  
APPLICANT: Weinrich, Scott L.  
TITLE OF INVENTION: Methods for Detecting the RNA Component of  
TITLE OF INVENTION: Telomerase  
NUMBER OF SEQUENCES: 26  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP  
STREET: Two Embarcadero Center, 8th Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/770,565  
FILING DATE: 20-DEC-1996  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-002300US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 415-576-0200  
TELEFAX: 415-576-0300  
INFORMATION FOR SEQ ID NO: 7:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA  
US-08-770-565-7

Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 83;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 290 CTGCCACCGGAGAGTTGG 309  
Db 20 CTGCCACCGGAGAGTTGG 1

## RESULT 129

US-08-770-565-13/c  
Sequence 13, Application US/08770565  
Patent No. 5846723  
GENERAL INFORMATION:  
APPLICANT: Kim, Nam Woo  
APPLICANT: Wu, Fred  
APPLICANT: Kealey, James T.  
APPLICANT: Pruzan, Ronald  
APPLICANT: Weinrich, Scott L.  
TITLE OF INVENTION: Methods for Detecting the RNA Component of  
TITLE OF INVENTION: Telomerase  
NUMBER OF SEQUENCES: 26  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP  
STREET: Two Embarcadero Center, 8th Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/770,565  
FILING DATE: 20-DEC-1996  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-002300US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 415-576-0200  
TELEFAX: 415-576-0300  
INFORMATION FOR SEQ ID NO: 13:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA  
US-08-770-565-13

Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 83;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 159 TCTAGAGCAACAAAAATG 178  
Db 20 TCTAGAGCAACAAAAATG 1

## RESULT 130

US-08-485-778-6/c  
Sequence 6, Application US/08485778  
Patent No. 5876979  
GENERAL INFORMATION:  
APPLICANT: Andrews, William H.  
APPLICANT: Avilion, Ariel Athena  
APPLICANT: Feng, Junli  
APPLICANT: Greider, Carol  
APPLICANT: Marhuenda, Maria Antonia Blasco  
APPLICANT: Villeponteau, Bryant  
TITLE OF INVENTION: RNA COMPONENT OF TELOMERASE  
NUMBER OF SEQUENCES: 45

; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.  
; STREET: Two Militia Drive  
; CITY: Lexington  
; STATE: MA  
; COUNTRY: US  
; ZIP: 02173  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA: US/08/485,778  
; APPLICATION NUMBER: US/08/485,778  
; FILING DATE: 07-JE-1995  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/387,524  
; FILING DATE: 13-FEB-1995  
; APPLICATION NUMBER: US 08/330,123  
; FILING DATE: 27-OCT-1994  
; APPLICATION NUMBER: US 08/272,102  
; FILING DATE: 07-JUL-1994  
; NAME: Granahan, Patricia  
; REGISTRATION NUMBER: 32,227  
; REFERENCE/DOCKET NUMBER: CSHL94-05A4  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 617-861-9540  
; TELEFAX: 617-861-9540  
; INFORMATION FOR SEQ ID NO: 6:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 20 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; US-08-485-778-6

Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 83;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 41 TTTGCTTAACCTAAGTGGAG 60  
|||||  
Db 20 TTTGCTTAACCTAAGTGGAG 1

RESULT 131  
US-08-485-778-9/c  
; Sequence 9, Application US/08485778  
; Patent No. 5876979  
; GENERAL INFORMATION:  
; APPLICANT: Andrews, William H.  
; APPLICANT: Avilion, Ariel Athena  
; APPLICANT: Funk, Walter  
; APPLICANT: Greider, Carol  
; APPLICANT: Marhuenda, Maria Antonia Blasco  
; APPLICANT: Villeponteau, Bryant  
; TITLE OF INVENTION: RNA COMPONENT OF TELOMERASE  
; NUMBER OF SEQUENCES: 45  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.  
; STREET: Two Militia Drive  
; CITY: Lexington  
; STATE: MA  
; COUNTRY: US  
; ZIP: 02173  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/485,778  
; FILING DATE: 07-JE-1995  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/387,524  
; FILING DATE: 13-FEB-1995  
; APPLICATION NUMBER: US 08/330,123  
; FILING DATE: 27-OCT-1994  
; APPLICATION NUMBER: US 08/272,102  
; FILING DATE: 07-JUL-1994  
; NAME: Granahan, Patricia  
; REGISTRATION NUMBER: 32,227  
; REFERENCE/DOCKET NUMBER: CSHL94-05A4  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 617-861-9540  
; TELEFAX: 617-861-9540  
; INFORMATION FOR SEQ ID NO: 9:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 20 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; US-08-485-778-9

Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 83;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GGTTCGGAGGGTGGCGCTG 21  
|||||  
Db 20 GGTTCGGAGGGTGGCGCTG 1

RESULT 132  
US-08-472-802C-8/c  
; Sequence 8, Application US/08472802C  
; Patent No. 5958680  
; GENERAL INFORMATION:  
; APPLICANT: Villeponteau, Bryant  
; APPLICANT: Feng, Junli  
; APPLICANT: Andrews, William H.  
; TITLE OF INVENTION: Mammalian Telomerase  
; NUMBER OF SEQUENCES: 44  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/472,802C  
; FILING DATE: 07-JUN-1995  
; CLASSIFICATION: 514  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/272,102  
; FILING DATE: 07-JUL-1994  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/330,123  
; FILING DATE: 27-OCT-1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Smith, William M.

```
/
/ REGISTRATION NUMBER: 30,223
/ REFERENCE/DOCKET NUMBER: 15389-000820
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 576-0200
/ TELEFAX: (415) 576-0300
/ INFORMATION FOR SEQ ID NO: 8:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 20 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA (genomic)
/
US-08-472-802C-8
Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GGTGGCGAGGTGGGCTG 21
| | | | | | | | | | | | | | | | | | | |
Db 20 GGTGGCGAGGTGGGCTG 1

RESULT 133
US-08-472-802C-41/c
; Sequence 41, Application US/08472802C
; Patent No. 5958680
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 44
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/472,802C
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA: US 08/330,123
; FILING DATE: 27-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M.
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 15389-000820
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 41:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: RNA
/
US-08-472-802C-41
Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

/
/ REGISTRATION NUMBER: 30,223
/ REFERENCE/DOCKET NUMBER: 15389-000820
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 576-0200
/ TELEFAX: (415) 576-0300
/ INFORMATION FOR SEQ ID NO: 8:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 20 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA (genomic)
/
US-08-833-377-7/c
; Sequence 7, Application US/08833377
; Patent No. 5968506
; GENERAL INFORMATION:
; APPLICANT: Weinrich, Scott L.
; APPLICANT: Atkinson III, Edward M.
; APPLICANT: Lichtsteiner, Serge P.
; APPLICANT: Vasserot, Alain P.
; APPLICANT: Pruzan, Ronald A.
; APPLICANT: Kealey, James T.
; TITLE OF INVENTION: Purified Telomerase
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/833,377
; FILING DATE: 04-APR-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/510,736
; FILING DATE: 04-AUG-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001110US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; FEATURE:
; NAME/KEY:
; LOCATION: 1..20
; OTHER INFORMATION: /note= "Oligo 14ab"
/
US-08-833-377-7
Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 361 AGGCCGCGAGGAGGAGGACG 380
| | | | | | | | | | | | | | | | | | | |
Db 20 AGGCCGCGAGGAGGAGGACG 1

RESULT 135
US-08-520-550A-6/c
; Sequence 6, Application US/08520550A
; Patent No. 6013468
; GENERAL INFORMATION:
```

APPLICANT: Andrews, William H.  
APPLICANT: Avilion, Ariel A.  
APPLICANT: Feng, Junli  
APPLICANT: Funk, Walter  
APPLICANT: Greider, Carol  
APPLICANT: Marhuenda, Maria A. B.  
APPLICANT: Villeponteau, Bryant  
TITLE OF INVENTION: RNA Component of Telomerase  
NUMBER OF SEQUENCES: 47  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.  
STREET: Two Militia Drive  
CITY: Lexington  
STATE: MA  
COUNTRY: US  
ZIP: 02173  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/520.550A  
FILING DATE: 29-AUG-1995  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/387,524  
FILING DATE: 13-FEB-1995  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/330,123  
FILING DATE: 27-OCT-1994  
APPLICATION NUMBER: US 08/272,102  
FILING DATE: 07-JUL-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: Granahan, Patricia  
REGISTRATION NUMBER: 32,227  
REFERENCE/DOCKET NUMBER: CSHL94-05A3B  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617-861-9540  
TELEFAX: 617-861-9540  
INFORMATION FOR SEQ ID NO: 6:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-520-550A-6

Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 83;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 41 TTTGCTTAACCTAACTGAG 60  
|||||  
Db 20 TTTGCTTAACCTAACTGAG 1

RESULT 136  
US-08-520-550A-9/c  
Sequence 9, Application US/08520550A  
Patent No. 6013468  
GENERAL INFORMATION:  
APPLICANT: Andrews, William H.  
APPLICANT: Avilion, Ariel A.  
APPLICANT: Feng, Junli  
APPLICANT: Funk, Walter  
APPLICANT: Greider, Carol  
APPLICANT: Marhuenda, Maria A. B.  
APPLICANT: Villeponteau, Bryant  
TITLE OF INVENTION: RNA Component of Telomerase  
NUMBER OF SEQUENCES: 47  
CORRESPONDENCE ADDRESS:

ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.  
STREET: Two Militia Drive  
CITY: Lexington  
STATE: MA  
COUNTRY: US  
ZIP: 02173  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/520.550A  
FILING DATE: 29-AUG-1995  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/387,524  
FILING DATE: 13-FEB-1995  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/330,123  
FILING DATE: 27-OCT-1994  
APPLICATION NUMBER: US 08/272,102  
FILING DATE: 07-JUL-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: Granahan, Patricia  
REGISTRATION NUMBER: 32,227  
REFERENCE/DOCKET NUMBER: CSHL94-05A3B  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617-861-6240  
TELEFAX: 617-861-9540  
INFORMATION FOR SEQ ID NO: 9:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-520-550A-9

Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 83;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GGTTCGGAGGTGGCCTG 21  
|||||  
Db 20 GGTTCGGAGGTGGCCTG 1

RESULT 137  
US-08-630-019A-13/c  
Sequence 13, Application US/08630019A  
Patent No. 6015710  
GENERAL INFORMATION:  
APPLICANT: Shay, Jerry W.  
APPLICANT: Wright, Woodring E.  
APPLICANT: Piatyszek, Mieczyslaw A.  
APPLICANT: Corey, David  
APPLICANT: No. 6015710ton, James C.  
TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
TITLE OF INVENTION: Peptide Nucleic Acids  
NUMBER OF SEQUENCES: 46  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30

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; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),
; DESCRIPTION: where (deoxy)ribose-phosphate linkages are replaced by
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"
; US-08-838-545-41

Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAAGG 65
Db 20 CTAACCCCTAACTGAGAAGG 1

RESULT 139
US-08-998-443-7/c
; Sequence 7, Application US/08998443
; Patent No. 6054575
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/998,443
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,678
; FILING DATE: 05-JUN-1996
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000811US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-08-998-443-7

Query Match 4.4%; Score 20; DB 1; Length 20;
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),
; DESCRIPTION: where (deoxy)ribose-phosphate linkages are replaced by
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via
; DESCRIPTION: glycine amino nitrogen through a methylenecarbonyl linker"
; US-08-630-019A-13

Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAAGG 65
Db 20 CTAACCCCTAACTGAGAAGG 1

RESULT 138
US-08-838-545-41/c
; Sequence 41, Application US/08938545
; Patent No. 6046307
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Platyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6046307ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; TITLE OF INVENTION: Peptide Nucleic Acids
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/838,545
; FILING DATE: 09-APR-1997
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/630,019
; FILING DATE: 09-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 41:

```



```
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GGTTCGGAGGGTGGGCTG 21
Db 20 GGTTCGGAGGGTGGGCTG 1

RESULT 140
US-08-998-443-26/c
; Sequence 26, Application US/08998443
; Patent No. 6054575
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/998,443
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,678
; FILING DATE: 05-JUN-1996
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000811US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 26:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-998-443-26

Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 41 TTTGCTAACCCCTAAGTGA 60
Db 20 TTTGCTAACCCCTAAGTGA 1

RESULT 141
US-08-998-443-29/c
; Sequence 29, Application US/08998443
; Patent No. 6054575
; GENERAL INFORMATION:
```

```
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/998,443
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,678
; FILING DATE: 05-JUN-1996
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000811US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: RNA
US-08-998-443-29

Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GGTTCGGAGGGTGGGCTG 21
Db 20 GGTTCGGAGGGTGGGCTG 1

RESULT 142
US-09-060-523-7/c
; Sequence 7, Application US/09060523
; Patent No. 6256535
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
```

```
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/060,523
FILING DATE: 14-APR-1998
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/660,678
FILING DATE: 05-JUN-1996
APPLICATION DATA:
APPLICATION NUMBER: US 08/330,123
FILING DATE: 27-OCT-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/272,102
FILING DATE: 07-JUL-1994
ATTORNEY/AGENT INFORMATION:
NAME: Storella, John R.
REGISTRATION NUMBER: 32,944
REFERENCE/DOCKET NUMBER: 015389-000813US
TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
MOLECULE TYPE: DNA
US-09-060-523-7

Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GGTTGCGAGGCTGGGCTG 21
Db 20 GGTTGCGAGGCTGGGCTG 1

RESULT 143
US-09-349-532-41/C
Sequence 41, Application US/09349532
Patent No. 6294650
GENERAL INFORMATION:
APPLICANT: Shay, Jerry W.
APPLICANT: Wright, Woodring E.
APPLICANT: Piatyszek, Mieczyslaw A.
APPLICANT: Corey, David R.
APPLICANT: No. 6294650ton, James C.
TITLE OF INVENTION: Modulation of Mammalian Telomerase by
TITLE OF INVENTION: Peptide Nucleic Acids
NUMBER OF SEQUENCES: 60
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/349,532
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
```

```
APPLICATION NUMBER: US 08/838,545
FILING DATE: 09-APR-1997
APPLICATION NUMBER: US 08/630,019
FILING DATE: 09-APR-1996
ATTORNEY/AGENT INFORMATION:
NAME: Storella, John R.
REGISTRATION NUMBER: 32,944
REFERENCE/DOCKET NUMBER: 015389-001610US
TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 41:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acid
DESCRIPTION: /desc = "peptide nucleic acid (PNA),
DESCRIPTION: where (deoxy/ribose-phosphate linkages are replaced by
DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via
DESCRIPTION: Glycine amino N through a methylenecarbonyl linker"
US-09-349-532-41

Query Match 4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAACTGAGAAGG 65
Db 20 CTAACCCCTAACTGAGAAGG 1

RESULT 144
US-09-580-517-4/C
Sequence 4, Application US/09580517
Patent No. 6320039
GENERAL INFORMATION:
APPLICANT: VILLEPONTEAU, Bryant
FENG, Junli
FUNK, Walter
ANDREWS, William H.
TITLE OF INVENTION: HUMAN TELOMERASE
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend Khourie and Crew
STREET: 379 Lytton Avenue
CITY: Palo Alto
STATE: California
COUNTRY: US
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/580,517
FILING DATE: 25-May-2000
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/330,123
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Smith, William M
REGISTRATION NUMBER: 30,223
REFERENCE/DOCKET NUMBER: 15389-000810
TELEPHONE: (415) 326-2400
TELEFAX: (415) 326-2422
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
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;
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: RNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-580-517-4
      4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 41 TTTGTCTAACCTTAACGAG 60
Db 20 TTTGTCTAACCTTAACGAG 1

RESULT 145
US-09-580-517-7/c
; Sequence 7, Application US/09580517
; Patent No. 6320039
; GENERAL INFORMATION:
; APPLICANT: VILLEPONTEAU, Bryant
; FENG, Junli
; FUNK, Walter
; ANDREWS, William H.
; TITLE OF INVENTION: HUMAN TELOMERASE
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend Khourie and Crew
; STREET: 379 Lytton Avenue
; CITY: Palo Alto
; STATE: California
; COUNTRY: US
; ZIP: 94301
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/580,517
; FILING DATE: 25-May-2000
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/330,123
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 15389-000810
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 326-2400
; TELEFAX: (415) 326-2422
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 7:
US-09-580-517-7
      4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GGTTCGGAGGGTGGGCGCTG 21
Db 20 GGTTCGGAGGGTGGGCGCTG 1

RESULT 146
US-09-580-517-7/c
; Sequence 7, Application US/09580517
; Patent No. 6320039
; GENERAL INFORMATION:
; APPLICANT: VILLEPONTEAU, Bryant
; FENG, Junli
; FUNK, Walter
; ANDREWS, William H.
; TITLE OF INVENTION: HUMAN TELOMERASE
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend Khourie and Crew
; STREET: 379 Lytton Avenue
; CITY: Palo Alto
; STATE: California
; COUNTRY: US
; ZIP: 94301
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/580,517
; FILING DATE: 25-May-2000
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/330,123
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Smith, William M
; REGISTRATION NUMBER: 30,223
; REFERENCE/DOCKET NUMBER: 15389-000810
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 326-2400
; TELEFAX: (415) 326-2422
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 7:
US-09-580-517-7
      4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GGTTCGGAGGGTGGGCGCTG 21
Db 20 GGTTCGGAGGGTGGGCGCTG 1

RESULT 146
US-09-580-517-7/c
; Sequence 7, Application US/09057351
; Patent No. 6548298
; GENERAL INFORMATION:
; APPLICANT: VILLEPONTEAU, Bryant
; FENG, Junli
; FUNK, Walter
; ANDREWS, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; APPLICATION NUMBER: US 08/472,802
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000821US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-057-351-7
      4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 83;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 GGTTCGGAGGGTGGGCGCTG 21
Db 20 GGTTCGGAGGGTGGGCGCTG 1

RESULT 147
US-09-057-351-40/c
; Sequence 40, Application US/09057351
; Patent No. 6548298
; GENERAL INFORMATION:
; APPLICANT: VILLEPONTEAU, Bryant
; FENG, Junli
; FUNK, Walter
; ANDREWS, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
```

STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/057,351  
FILING DATE: 08-APR-1994  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/272,102  
FILING DATE: 07-JUL-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/330,123  
FILING DATE: 27-OCT-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/472,802  
FILING DATE: 07-JUN-1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-000821US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 40:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 20 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: RNA  
US-09-057-351-40

Query Match 4.4%; Score 20; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 83;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 41 TTGTCTAACCTTAACCTGAG 60  
|||||  
Db 20 TTGTCTAACCTTAACCTGAG 1

RESULT 148  
US-08-770-565-9/c  
Sequence 9, Application US/08770565  
Patent No. 5846723  
GENERAL INFORMATION:  
APPLICANT: Kim, Nam Woo  
APPLICANT: Wu, Fred  
APPLICANT: Kealey, James T.  
APPLICANT: Pruzan, Ronald  
APPLICANT: Weinrich, Scott L.  
TITLE OF INVENTION: Methods for Detecting the RNA Component of  
TITLE OF INVENTION: Telomerase  
NUMBER OF SEQUENCES: 26  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP  
STREET: Two Embarcadero Center, 8th Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/770,565  
FILING DATE: 20-DEC-1996  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-002300US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 415-576-0200  
TELEFAX: 415-576-0300  
INFORMATION FOR SEQ ID NO: 9:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 19 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA  
US-08-770-565-9

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 93;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 148 CCACCGTTCATCTAGAGC 166  
|||||  
Db 19 CCACCGTTCATCTAGAGC 1

RESULT 149  
US-08-838-545-60  
Sequence 60, Application US/08838545  
Patent No. 6046307  
GENERAL INFORMATION:  
APPLICANT: Shay, Jerry W.  
APPLICANT: Wright, Woodring E.  
APPLICANT: Piatyszek, Mieczyslaw A.  
APPLICANT: Corey, David R.  
APPLICANT: No. 6046307ton, James C.  
TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
TITLE OF INVENTION: Peptide Nucleic Acids  
NUMBER OF SEQUENCES: 60  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/838,545  
FILING DATE: 09-APR-1997  
CLASSIFICATION: 536  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/630,019  
FILING DATE: 09-APR-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-001610US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 60:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 19 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single

```
; TOPOLOGY: linear
; MOLECULE TYPE: RNA (genomic)
US-08-838-545-60

Query Match 4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 78.9%; Pred. No. 93;
Matches 15; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 44 GTCTAACCTTAACCTGAGAA 62
Db 1 GUCUACCCUACUGAGAA 19

RESULT 150
US-09-349-532-60
; Sequence 60, Application US/09349532
; Patent No. 6294650
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6294650ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; TITLE OF INVENTION: Peptide Nucleic Acids
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/349,532
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/838,545
; FILING DATE: 09-APR-1997
; APPLICATION NUMBER: US 08/630,019
; FILING DATE: 09-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 60:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 19 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: RNA (genomic)
US-09-349-532-60

Query Match 4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 78.9%; Pred. No. 93;
Matches 15; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 44 GTCTAACCTTAACCTGAGAA 62
Db 1 GUCUACCCUACUGAGAA 19

RESULT 151
US-09-018-125-2/c
; Sequence 2, Application US/09018125A
; Patent No. 6468983
; GENERAL INFORMATION:
; APPLICANT: Silverman, Robert H.
; APPLICANT: Kondo, Seiji
; APPLICANT: Cowell, John K.
; APPLICANT: Li, Guiying
; APPLICANT: Torrence, Paul F.
; TITLE OF INVENTION: RNASE L ACTIVATORS AND ANTISENSE OLIGONUCLEOTIDES
; TITLE OF INVENTION: EFFECTIVE TO TREAT TELOMERASE-EXPRESSING MALIGNANCIES
; FILE REFERENCE: 8656-022
; CURRENT APPLICATION NUMBER: US/09/018,125A
; CURRENT FILING DATE: 1999-02-03
; EARLIER APPLICATION NUMBER: 60/044,507
; EARLIER FILING DATE: 1997-04-21
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURES:
; OTHER INFORMATION: Description of Artificial Sequence:
; OTHER INFORMATION: oligonucleotide
US-09-018-125-2

Query Match 4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 93;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 76 GTGCTTTTGTCTCCCGCGC 94
Db 19 GTGCTTTTGTCTCCCGCGC 1

RESULT 152
US-08-833-377-14/c
; Sequence 14, Application US/08833377
; Patent No. 5968506
; GENERAL INFORMATION:
; APPLICANT: Weinrich, Scott L.
; APPLICANT: Atkinson III, Edward M.
; APPLICANT: Lichtsteiner, Serge P.
; APPLICANT: Vasserot, Alain P.
; APPLICANT: Pruzan, Ronald A.
; APPLICANT: Kealey, James T.
; TITLE OF INVENTION: Purified Telomerase
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/833,377
; FILING DATE: 04-APR-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/510,736
; FILING DATE: 04-AUG-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001110US
; TELECOMMUNICATION INFORMATION:
```

; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 14:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 20 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
; FEATURE:  
; NAME/KEY: modified\_base  
; LOCATION: 1  
; OTHER INFORMATION: /mod base= OTHER  
; OTHER INFORMATION: /note= "N = 5' biotinylated cytidine"  
; FEATURE:  
; NAME/KEY: -  
; LOCATION: 1..20  
; OTHER INFORMATION: /note= "biotinylated Oligo 14ab"  
; US-08-833-377-14

Query Match 4.2%; Score 19; DB 1; Length 20;  
Best Local Similarity 100.0%; Pred. No. 99;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 361 AGCGCCGAGGAGGAAC 379  
| | | | | | | | | | | | | | | | | | | | | |  
Db 20 AGCGCCGAGGAGGAAC 2

RESULT 153  
US-08-838-545-9/c  
; Sequence 9, Application US/08838545  
; Patent No. 6046307  
; GENERAL INFORMATION:  
; APPLICANT: Shay, Jerry W.  
; APPLICANT: Wright, Woodring E.  
; APPLICANT: Piatyszek, Mieczyslaw A.  
; APPLICANT: Corey, David R.  
; APPLICANT: No. 6046307ton, James C.  
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
; TITLE OF INVENTION: Peptide Nucleic Acids  
; NUMBER OF SEQUENCES: 60  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/838,545  
; FILING DATE: 09-APR-1997  
; CLASSIFICATION: 536  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/630,019  
; FILING DATE: 09-APR-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001610US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 9:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 18 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single

; TOPOLOGY: linear  
; MOLECULE TYPE: other nucleic acid  
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by  
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"  
; US-08-838-545-9

Query Match 4.0%; Score 18; DB 1; Length 18;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 48 AACCTTAAGTGAAGGG 65  
| | | | | | | | | | | | | | | | | | | | | |  
Db 18 AACCTTAAGTGAAGGG 1

RESULT 154  
US-09-349-532-9/c  
; Sequence 9, Application US/09349532  
; Patent No. 6294650  
; GENERAL INFORMATION:  
; APPLICANT: Shay, Jerry W.  
; APPLICANT: Wright, Woodring E.  
; APPLICANT: Piatyszek, Mieczyslaw A.  
; APPLICANT: Corey, David R.  
; APPLICANT: No. 6294650ton, James C.  
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
; TITLE OF INVENTION: Peptide Nucleic Acids  
; NUMBER OF SEQUENCES: 60  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/349,532  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/838,545  
; FILING DATE: 09-APR-1997  
; APPLICATION NUMBER: US 08/630,019  
; FILING DATE: 09-APR-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001610US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 9:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 18 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: other nucleic acid  
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by  
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"  
; US-09-349-532-9

Query Match 4.0%; Score 18; DB 1; Length 18;  
Best Local Similarity 100.0%; Pred. No. 1e+02;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 48 AACCTAACTGAGAAGG 65  
|||  
Db 18 AACCTAACTGAGAAGG 1

RESULT 155

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US-08-770-565-14/c
;
; Sequence 14, Application US/08770565
; Patent No. 5846723
;
; GENERAL INFORMATION:
;
; APPLICANT: Kim, Nam Woo
;
; APPLICANT: Wu, Fred
;
; APPLICANT: Kealey, James T.
;
; APPLICANT: Pruzan, Ronald
;
; APPLICANT: weinrich, Scott L.
;
; TITLE OF INVENTION: Methods for Detecting the RNA Component of

```

Query Match 3.8%; Score 17; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 1.2e+02;  
Matches 17; Conservative 0; Mismatches 0; Indels

Qy 177 TGTACGCTGCTGGCCG 193  
|||||  
pb 17 TGTACGCTGCTGGCCG 1

RESULT 156

RESOL 136  
US-08-974-549A-543/c  
; Sequence 543, Application US/08974549A  
; Patent No. 6166178  
; GENERAL INFORMATION:  
; APPLICANT: Cech, Thomas R.  
; APPLICANT: Lingner, Joachim  
; APPLICANT: Nakamura, Toru  
; APPLICANT: Chapman, Karen B.  
; APPLICANT: Morin, Gregg B.  
; APPLICANT: Harley, Calvin B.  
; APPLICANT: Andrews, William H.

```

; TITLE OF INVENTION: Human Telomerase Catalytic Subunit
; NUMBER OF SEQUENCES: 727
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/974,549A
; FILING DATE: 19-NOV-1997
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/724,643
; FILING DATE: 01-OCT-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/844,419
; FILING DATE: 18-APR-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/846,017
; FILING DATE: 25-APR-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/851,843
; FILING DATE: 06-MAY-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/854,050
; FILING DATE: 09-MAY-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/911,312
; FILING DATE: 14-AUG-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/912,951
; FILING DATE: 14-AUG-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/915,503
; FILING DATE: 14-AUG-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US97/17618
; FILING DATE: 01-OCT-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/US97/17885
; FILING DATE: 01-OCT-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph Ted
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 015389-002610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 543:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 18 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; FEATURE:
; NAME/KEY: -
; LOCATION: 1..18
; INFORMATION: /note="antisense hTERT molecule"
; PS-08-974-549A-543

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Query Match 3.6%; Score 16.4; DB 1; Length 18;  
Best Local Similarity 94.4%; Pred. No. 1.4e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels

QY 149 CACCGTTCATTCTAGAGC 166

Db 18 CACCCCTTCATTCTAGAGC 1

Query Match 3.6%; Score 16.4; DB 1; Length 18;  
Best Local Similarity 94.4%; Pred. No. 1.4e+02;  
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

RESULT 157  
US-09-402-181B-543/C  
; Sequence 543, Application US/09402181B  
; Patent No. 6610839  
; GENERAL INFORMATION:  
; APPLICANT: Cech, Thomas R.  
; Lingner, Joachim  
; Nakamura, Toru  
; Chapman, Karen B.  
; Morin, Gregg B.  
; Harley, Calvin B.  
; Andrews, William H.  
; TITLE OF INVENTION: Human Telomerase Catalytic Subunit  
; NUMBER OF SEQUENCES: 633  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/402,181B  
; FILING DATE: 29-Sep-1997  
; CLASSIFICATION: <Unknown>  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/724,643  
; FILING DATE: 01-OCT-1996  
; APPLICATION NUMBER: US 08/844,419  
; FILING DATE: 18-APR-1997  
; APPLICATION NUMBER: US 08/846,017  
; FILING DATE: 25-APR-1997  
; APPLICATION NUMBER: US 08/851,843  
; FILING DATE: 06-MAY-1997  
; APPLICATION NUMBER: US 08/854,050  
; FILING DATE: 09-MAY-1997  
; APPLICATION NUMBER: US 08/911,312  
; FILING DATE: 14-AUG-1997  
; APPLICATION NUMBER: US 08/912,951  
; FILING DATE: 14-AUG-1997  
; APPLICATION NUMBER: US 08/915,503  
; FILING DATE: 14-AUG-1997  
; APPLICATION NUMBER: WO PCT/US97/17885  
; FILING DATE: 01-OCT-1997  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Ausenhus, Scott L.  
; REGISTRATION NUMBER: 42,271  
; REFERENCE/DOCKET NUMBER: 015389-002620US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 543:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 18 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
; FEATURE:  
; NAME/KEY: -  
; LOCATION: 1..18  
; OTHER INFORMATION: /note= "antisense hTERT molecule"  
; SEQUENCE DESCRIPTION: SEQ ID NO: 543:  
US-09-402-181B-543

Qy 149 CACCGTTCATTCTAGAGC 166  
Db 18 CACCCCTTCATTCTAGAGC 1

RESULT 158  
US-09-721-456-543/C  
; Sequence 543, Application US/09721456  
; Patent No. 6617110  
; GENERAL INFORMATION:  
; APPLICANT: Cech, Thomas R.  
; Lingner, Joachim  
; Nakamura, Toru  
; Chapman, Karen B.  
; Morin, Gregg B.  
; Harley, Calvin B.  
; Andrews, William H.  
; TITLE OF INVENTION: Human Telomerase Catalytic Subunit  
; NUMBER OF SEQUENCES: 727  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/721,456  
; FILING DATE: 22-No. 6617110-2000  
; CLASSIFICATION: <Unknown>  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US/08/974,549A  
; FILING DATE: 19-NOV-1997  
; APPLICATION NUMBER: US 08/724,643  
; FILING DATE: 01-OCT-1996  
; APPLICATION NUMBER: US 08/844,419  
; FILING DATE: 18-APR-1997  
; APPLICATION NUMBER: US 08/846,017  
; FILING DATE: 25-APR-1997  
; APPLICATION NUMBER: US 08/851,843  
; FILING DATE: 06-MAY-1997  
; APPLICATION NUMBER: US 08/854,050  
; FILING DATE: 09-MAY-1997  
; APPLICATION NUMBER: US 08/911,312  
; FILING DATE: 14-AUG-1997  
; APPLICATION NUMBER: US 08/912,951  
; FILING DATE: 14-AUG-1997  
; APPLICATION NUMBER: US 08/915,503  
; FILING DATE: 14-AUG-1997  
; APPLICATION NUMBER: WO PCT/US97/17618  
; FILING DATE: 01-OCT-1997  
; APPLICATION NUMBER: WO PCT/US97/17885  
; FILING DATE: 01-OCT-1997  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Apple, Randolph Ted  
; REGISTRATION NUMBER: 36,429  
; REFERENCE/DOCKET NUMBER: 015389-002610US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 543:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 18 base pairs



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;
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; FEATURE:
; NAME/KEY: -
; LOCATION: 1..18
; OTHER INFORMATION: /note= "antisense hTRT molecule"
; SEQUENCE DESCRIPTION: SEQ ID NO: 543:
US-09-721-456-543

Query Match          3.6%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 1.4e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 149 CACCGTTTCATTCTAGAGC 166
Db 18 CACCCCTTCATTCTAGAGC 1

RESULT 159
US-08-026-143B-13
; Sequence 13, Application US/08026143B
; Patent No. 6348327
; GENERAL INFORMATION:
; APPLICANT: Gorman, Cornelia M.,
; Groskreutz, Debyra J.
; TITLE OF INVENTION: Prohormone Convertase Transformed Cells and
; Polypeptide Synthesis
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WinPatIn (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/026.143B
; FILING DATE: 01-Mar-1993
; CLASSIFICATION: <unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/887265
; FILING DATE: 22-MAY-1992
; APPLICATION NUMBER: 07/803631
; FILING DATE: 06-DEC-1992
; APPLICATION NUMBER: PCT/US92/10621
; FILING DATE: 04-DEC-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Love, Richard B.
; REGISTRATION NUMBER: 34,659
; REFERENCE/DOCKET NUMBER: P0748P3
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-5530
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: Nucleic Acid
; STRANDEDNESS: Single
; TOPOLOGY: Linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 13:
US-08-026-143B-13

Query Match          3.6%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 1.6e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 149 CACCGTTTCATTCTAGAGC 166
Db 18 CACCCCTTCATTCTAGAGC 1

RESULT 161
US-08-026-143B-13
; Sequence 13, Application US/08026143B
; Patent No. 6348327
; GENERAL INFORMATION:
; APPLICANT: Gorman, Cornelia M.,
; Groskreutz, Debyra J.
; TITLE OF INVENTION: Prohormone Convertase Transformed Cells and
; Polypeptide Synthesis
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WinPatIn (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/026.143B
; FILING DATE: 01-Mar-1993
; CLASSIFICATION: <unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/887265
; FILING DATE: 22-MAY-1992
; APPLICATION NUMBER: 07/803631
; FILING DATE: 06-DEC-1992
; APPLICATION NUMBER: PCT/US92/10621
; FILING DATE: 04-DEC-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Love, Richard B.
; REGISTRATION NUMBER: 34,659
; REFERENCE/DOCKET NUMBER: P0748P3
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-5530
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: Nucleic Acid
; STRANDEDNESS: Single
; TOPOLOGY: Linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 13:
US-08-026-143B-13

Query Match          3.6%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 1.6e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
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```
Qy 156 CATTCTAGACGCAACAAAAA 176
Db 1 CATTCTAGACGCAACGACAA 21

RESULT 160
PCT-US92-10621-13
; Sequence 13, Application PC/TUS9210621
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Gorman, Cornelia M.,
; APPLICANT: Marriot, Dave,
; APPLICANT: Groskreutz, Debyra J.
; TITLE OF INVENTION: Prohormone Convertase Transformed Cells and Polypeptide Synthesis
; NUMBER OF SEQUENCES: 54
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 460 Point San Bruno Blvd
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: patin (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US92/10621
; FILING DATE: 19921204
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/887265
; FILING DATE: 22-MAY-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/803631
; FILING DATE: 06-DEC-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Adler, Carolyn R.
; REGISTRATION NUMBER: 32,324
; REFERENCE/DOCKET NUMBER: 748P2.PCT
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415/225-2614
; TELEFAX: 415/952-9881
; TELEFAX: 910/371-7168
; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 bases
; TYPE: NUCLEIC ACID
; STRANDEDNESS: single
; TOPOLOGY: linear
; PCT-US92-10621-13

Query Match          3.6%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 1.6e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 156 CATTCTAGACGCAACAAAAA 176
Db 1 CATTCTAGACGCAACGACAA 21

RESULT 161
PCT-US94-02233-13
; Sequence 13, Application PC/TUS9402233
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; TITLE OF INVENTION: Prohormone Convertase Transformed Cells and Polypeptide Synthesis
; NUMBER OF SEQUENCES: 54
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 460 Point San Bruno Blvd
; CITY: South San Francisco
```

```
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: patin (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US94/02233
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Love, Richard B.
; REGISTRATION NUMBER: 34,659
; REFERENCE/DOCKET NUMBER: 748P3PCT
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415/225-5530
; TELEFAX: 415/952-9881
; TELEX: 910/371-7168
; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 bases
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; PCT-US94-02233-13

Query Match 3.6%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 1.6e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 156 CATTCTAGAGCAACAAAAA 176
Db 1 CATTCTAGAGCAACAGACAA 21

RESULT 162
US-08-838-545-27
; Sequence 27, Application US/08838545
; Patent No. 6046307
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6046307ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; TITLE OF INVENTION: Peptide Nucleic Acids
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US 08/838,545
; FILING DATE: 09-APR-1997
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE: 09-APR-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0300
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 27:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid

; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: patin (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US94/02233
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0300
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 27:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid

; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0300
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 27:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid

; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0300
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 27:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid

Query Match 3.5%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 53 TAACTGAGAAGGCGGT 68
Db 1 TAACTGAGAAGGCGGT 16

RESULT 163
US-09-349-532-27
; Sequence 27, Application US/09349532
; Patent No. 6294650
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6294650ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; TITLE OF INVENTION: Peptide Nucleic Acids
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/349,532
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/838,545
; FILING DATE: 09-APR-1997
; APPLICATION NUMBER: US 08/630,019
; FILING DATE: 09-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0300
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 27:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid
```

```
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"
US-09-349-532-27

Query Match          3.5%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 53 TAACTGAGAGGGCGT 68
Db 1 TAACTGAGAGGGCGT 16

RESULT 164
US-09-345-882-76
; Sequence 76, Application US/09345882
; Patent No. 6399373
; GENERAL INFORMATION:
; APPLICANT: Bougueleret, Lydie
; TITLE OF INVENTION: A NUCLEIC ACID ENCODING A RETINOBLASTOMA BINDING PROTEIN (RBP-7)
; FILE REFERENCE: GENSET.031A
; CURRENT APPLICATION NUMBER: US/09/345.882
; CURRENT FILING DATE: 1999-06-30
; PRIOR APPLICATION NUMBER: US 60/091,315
; PRIOR FILING DATE: 1998-06-30
; PRIOR APPLICATION NUMBER: US 60/111,909
; PRIOR FILING DATE: 1998-12-10
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: Patent.pm
; SEQ ID NO 76
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: primer_bind
; LOCATION: 1..20
; OTHER INFORMATION: upstream amplification primer for SEQ 34, SEQ 55, SEQ 35, SEQ 56
US-09-345-882-76

Query Match          3.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 166 CAAACAAAAAATGTCAG 182
Db 1 CAAACAATAAATGTCAG 17

RESULT 165
US-09-596-938-11
; Sequence 11, Application US/09596938
; Patent No. 6355481
; GENERAL INFORMATION:
; APPLICANT: Li, Xiao-Jiang
; TITLE OF INVENTION: Huntington Disease Cellular Model:
; TITLE OF INVENTION: Stably Transfected PC12 Cells Expressing Mutant Huntingtin
; FILE REFERENCE: 5543-14
; CURRENT APPLICATION NUMBER: US/09/596.938
; CURRENT FILING DATE: 2000-06-19
; PRIOR APPLICATION NUMBER: 60/140.018
; PRIOR FILING DATE: 1999-06-18
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 11
; LENGTH: 20
; TYPE: DNA
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```
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: PCR primer
US-09-596-938-11

Query Match          3.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 313 CTGTCAGCCGCGGTCTCTC 332
Db 1 CTGCTGCCACGGGTTTCTC 20

RESULT 166
US-08-770-565-10/c
; Sequence 10, Application US/08770565
; Patent No. 5846723
; GENERAL INFORMATION:
; APPLICANT: Kim, Nam Woo
; APPLICANT: Wu, Fred
; APPLICANT: Kealey, James T.
; APPLICANT: Pruzan, Ronald
; APPLICANT: Weinrich, Scott L.
; TITLE OF INVENTION: Methods for Detecting the RNA Component of
; TITLE OF INVENTION: Telomerase
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/770,565
; FILING DATE: 20-DEC-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-0023000US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-576-0200
; TELEFAX: 415-576-0300
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-770-565-10

Query Match          3.3%; Score 15; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 152 CGTTTCATTCTAGAGC 166
Db 15 CGTTCATTCTAGAGC 1

RESULT 167
US-08-630-019A-12/c
; Sequence 12, Application US/08630019A
; Patent No. 6015710
; GENERAL INFORMATION:
```

; APPLICANT: Shay, Jerry W.  
; APPLICANT: Wright, Woodring E.  
; APPLICANT: Piattyszek, Mieczyslaw A.  
; APPLICANT: Corey, David  
; APPLICANT: No. 6015710ton, James C.  
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
; TITLE OF INVENTION: Peptide Nucleic Acids  
; NUMBER OF SEQUENCES: 46  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/630,019A  
; FILING DATE: 09-JUN-1996  
; CLASSIFICATION: 536  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001600US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 12:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: other nucleic acid  
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
; DESCRIPTION: where (deoxy)ribose-phosphate linkages are replaced by  
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
; DESCRIPTION: glycine amino nitrogen through a methylenecarbonyl linker"  
; US-08-630-019A-12

Query Match 3.3%; Score 15; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 1.4e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAAGTGG 60  
| | | | | | | | | | | | | | | | | | | | |  
Db 15 CTAACCCCTAAGTGG 1

RESULT 168  
US-08-630-019A-18/c  
; Sequence 18, Application US/08630019A  
; Patent No. 6015710  
; GENERAL INFORMATION:  
; APPLICANT: Shay, Jerry W.  
; APPLICANT: Wright, Woodring E.  
; APPLICANT: Piattyszek, Mieczyslaw A.  
; APPLICANT: Corey, David  
; APPLICANT: No. 6015710ton, James C.  
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
; TITLE OF INVENTION: Peptide Nucleic Acids  
; NUMBER OF SEQUENCES: 46  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834

; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/630,019A  
; FILING DATE: 09-JUN-1996  
; CLASSIFICATION: 536  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001600US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 18:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: other nucleic acid  
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
; DESCRIPTION: where (deoxy)ribose-phosphate linkages are replaced by  
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
; DESCRIPTION: glycine amino nitrogen through a methylenecarbonyl linker"  
; US-08-630-019A-18

Query Match 3.3%; Score 15; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 1.4e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGTCTAACCCCTAAC 56  
| | | | | | | | | | | | | | | | | | | | |  
Db 15 TTGTCTAACCCCTAAC 1

RESULT 169  
US-08-630-019A-40/c  
; Sequence 40, Application US/08630019A  
; Patent No. 6015710  
; GENERAL INFORMATION:  
; APPLICANT: Shay, Jerry W.  
; APPLICANT: Wright, Woodring E.  
; APPLICANT: Piattyszek, Mieczyslaw A.  
; APPLICANT: Corey, David  
; APPLICANT: No. 6015710ton, James C.  
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
; TITLE OF INVENTION: Peptide Nucleic Acids  
; NUMBER OF SEQUENCES: 46  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/630,019A  
; FILING DATE: 09-JUN-1996  
; CLASSIFICATION: 536  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001600US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200

; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 40:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: other nucleic acid  
; DESCRIPTION: /desc = "phosphorothioate (PS) nucleic acid"  
US-08-630-019A-40

Query Match 3.3%; Score 15; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 1.4e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAG 60  
| | | | | | | | | | | | | | |  
Db 15 CTAACCCCTAACTGAG 1

RESULT 170  
US-08-838-545-2/c  
; Sequence 2, Application US/08838545  
; Patent No. 6046307  
; GENERAL INFORMATION:  
; APPLICANT: Shay, Jerry W.  
; APPLICANT: Wright, Woodring E.  
; APPLICANT: Piatyszek, Mieczyslaw A.  
; APPLICANT: Corey, David R.  
; APPLICANT: No. 6046307ton, James C.  
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
; TITLE OF INVENTION: Peptide Nucleic Acids  
; NUMBER OF SEQUENCES: 60  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/838,545  
; FILING DATE: 09-APR-1997  
; CLASSIFICATION: 536  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/630,019  
; FILING DATE: 09-APR-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001610US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: other nucleic acid  
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by  
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"  
US-08-838-545-2

Query Match 3.3%; Score 15; DB 1; Length 15;

Best Local Similarity 100.0%; Pred. No. 1.4e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 46 CTAACCCCTAACTGAG 60  
| | | | | | | | | | | | | | |  
Db 15 CTAACCCCTAACTGAG 1

RESULT 171  
US-08-838-545-5/c  
; Sequence 5, Application US/08838545  
; Patent No. 6046307  
; GENERAL INFORMATION:  
; APPLICANT: Shay, Jerry W.  
; APPLICANT: Wright, Woodring E.  
; APPLICANT: Piatyszek, Mieczyslaw A.  
; APPLICANT: Corey, David R.  
; APPLICANT: No. 6046307ton, James C.  
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
; TITLE OF INVENTION: Peptide Nucleic Acids  
; NUMBER OF SEQUENCES: 60  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/838,545  
; FILING DATE: 09-APR-1997  
; CLASSIFICATION: 536  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/630,019  
; FILING DATE: 09-APR-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001610US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 5:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: other nucleic acid  
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by  
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"  
US-08-838-545-5

Query Match 3.3%; Score 15; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 1.4e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGCTAACCCCTAAC 56  
| | | | | | | | | | | | | | |  
Db 15 TTGCTAACCCCTAAC 1

RESULT 172  
US-08-838-545-28  
; Sequence 28, Application US/08838545  
; Patent No. 6046307

```

;
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6046307ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/838,545
; FILING DATE: 09-APR-1997
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/630,019
; FILING DATE: 09-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 28:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid (PNA),
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"
; US-08-838-545-28

Query Match 3.3%; Score 15; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 49 ACCCTAACTGAGAAG 63
Db 1 ACCCTAACTGAGAAG 15

RESULT 173
US-08-838-545-45/c
; Sequence 45, Application US/08038545
; Patent No. 6046307
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6046307ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor

```

```

;
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/838,545
; FILING DATE: 09-APR-1997
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/630,019
; FILING DATE: 09-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 45:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "phosphorothioate (PS)
; US-08-838-545-45

Query Match 3.3%; Score 15; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCTAACTGAG 60
Db 15 CTAACCTAACTGAG 1

RESULT 174
US-09-349-532-2/c
; Sequence 2, Application US/09349532
; Patent No. 6294650
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6294650ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/349,532
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:

```

```
; APPLICATION NUMBER: US 08/838,545
; FILING DATE: 09-APR-1997
; APPLICATION NUMBER: US 08/630,019
; FILING DATE: 09-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"
US-09-349-532-2

Query Match 3.3%; Score 15; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCTTAACCTGAG 60
Db 15 CTAACCTTAACCTGAG 1
|||||

RESULT 175
US-09-349-532-5/c
; Sequence 5, Application US/09349532
; Patent No. 6294650
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6294650ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; TITLE OF INVENTION: Peptide Nucleic Acids
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/349,532
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/838,545
; FILING DATE: 09-APR-1997
; APPLICATION NUMBER: US 08/630,019
; FILING DATE: 09-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by
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```
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"
US-09-349-532-5

Query Match 3.3%; Score 15; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGCTTAACCTTAAC 56
Db 15 TTGCTTAACCTTAAC 1
|||||

RESULT 176
US-09-349-532-28
; Sequence 28, Application US/09349532
; Patent No. 6294650
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6294650ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; TITLE OF INVENTION: Peptide Nucleic Acids
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/349,532
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/838,545
; FILING DATE: 09-APR-1997
; APPLICATION NUMBER: US 08/630,019
; FILING DATE: 09-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 28:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by
```

;  
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"  
US-09-349-532-28

Query Match 3.3%; Score 15; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 1.4e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 49 ACCCTAACTGAGAAG 63

Db 1 ACCCTAACTGAGAAG 15

RESULT 177

US-09-349-532-45/c  
; Sequence 45, Application US/09349532  
; Patent No. 6294650  
; GENERAL INFORMATION:  
; APPLICANT: Shay, Jerry W.  
; APPLICANT: Wright, Woodring E.  
; APPLICANT: Piatyszek, Mieczyslaw A.  
; APPLICANT: Corey, David R.  
; APPLICANT: No. 6294650ton, James C.  
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
; TITLE OF INVENTION: Peptide Nucleic Acids  
; NUMBER OF SEQUENCES: 60  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/349,532  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/838,545  
; FILING DATE: 09-APR-1997  
; APPLICATION NUMBER: US 08/630,019  
; FILING DATE: 09-APR-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001610US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 45:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: other nucleic acid  
; DESCRIPTION: /desc = "phosphorothioate (PS)  
; DESCRIPTION: nucleic acid"

Query Match 3.3%; Score 15; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 1.4e+02;  
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAG 60

Db 15 CTAACCCCTAACTGAG 1

RESULT 178

US-09-673-298-4/c  
; Sequence 4, Application US/09673298  
; Patent No. 6469156  
; GENERAL INFORMATION:  
; APPLICANT: THE GOVERNMENT OF THE UNITED STATES OF AMERICA, AS  
; APPLICANT: REPRESENTED BY THE SECRETARY OF THE DEPARTMENT OF  
; APPLICANT: HEALTH AND HUMAN SERVICES CENTERS FOR DISEASE  
; APPLICANT: CONTROL AND PREVENTION  
; APPLICANT: SCHAFER, MILLIE P.  
; APPLICANT: REID, THOMAS M.  
; TITLE OF INVENTION: RAPID AND SENSITIVE METHOD FOR DETECTING  
; TITLE OF INVENTION: HISTOPLASMA CAPSULATUM  
; FILE REFERENCE: 62951 / PCT  
; CURRENT APPLICATION NUMBER: US/09/673,298  
; CURRENT FILING DATE: 2000-10-12  
; PRIOR APPLICATION NUMBER: U.S. 60/082,477  
; PRIOR FILING DATE: 1998-04-21  
; NUMBER OF SEQ ID NOS: 4  
; SOFTWARE: FastSEQ for Windows Version 3.0  
; SEQ ID NO 4  
; LENGTH: 18  
; TYPE: DNA  
; ORGANISM: UNKNOWN  
; FEATURE:  
; OTHER INFORMATION: PRIMER  
US-09-673-298-4

Query Match 3.3%; Score 14.8; DB 1; Length 18;  
Best Local Similarity 88.9%; Pred. No. 1.7e+02;  
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 410 CTGAGCTGTGGACGTGC 427

Db 18 CTGACCGTGGGACGTGC 1

RESULT 179

US-08-392-818-22  
; Sequence 22, Application US/08392818  
; Patent No. 5688643  
; GENERAL INFORMATION:  
; APPLICANT: Oka, Takanori  
; APPLICANT: Matsunaga, Hironari  
; APPLICANT: Yamane, Akio  
; TITLE OF INVENTION: METHOD OF NUCLEIC ACID-DIFFERENTIATION  
; TITLE OF INVENTION: AND ASSAY KIT FOR NUCLEIC ACID-DIFFERENTIATION  
; NUMBER OF SEQUENCES: 24  
; CORRESPONDENCE ADDRESS:  
; ADDRESSER: Birch, Stewart, Kolasch and Birch  
; STREET: PO Box 747  
; CITY: Falls Church  
; STATE: VA  
; COUNTRY: US  
; ZIP: 22040-0747  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/392,818  
; FILING DATE: 27-FEB-1995  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Murphy Jr, Gerald M  
; REGISTRATION NUMBER: 28,977  
; REFERENCE/DOCKET NUMBER: 0171-533P  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (703) 205-8000  
; TELEFAX: (703) 205-8050  
; TELEX: 248345



```

Query Match      3.1%; Score 14; DB 1; Length 14;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      52  CTAACTGAGAAGG 65
      |||||
Db      14  CTAACTGAGAAGG 1

RESULT 182
US-08-158-352-2
; Sequence 2, Application US/08158352
; Patent No. 5700922
; GENERAL INFORMATION:
; APPLICANT: Philip Dan Cook
; TITLE OF INVENTION: PNA-DNA-PNA Chimeric
; TITLE OF INVENTION: Macromolecules
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz and
; ADDRESSEE: No. 5700922ris
; STREET: One Liberty Place - 46th Floor
; CITY: Philadelphia
; STATE: PA
; COUNTRY: U.S.A.
; ZIP: 19103
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk, 1.44 Mb storage
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Wordperfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/158,352
; FILING DATE: herewith
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US92/11339

```

```

/ TITLE OF INVENTION: MODULATION OF GENE EXPRESSION
/ TITLE OF INVENTION: IN PLANTS
/ NUMBER OF SEQUENCES: 1263
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Lyon & Lyon
/ STREET: 633 West Fifth Street
/ STREET: Suite 4700
/ CITY: Los Angeles
/ STATE: California
/ COUNTRY: U.S.A.
/ ZIP: 90071-2066
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
/ MEDIUM TYPE: storage
/ COMPUTER: IBM Compatible
/ OPERATING SYSTEM: IBM P.C. DOS 5.0
/ SOFTWARE: Word Perfect 5.1
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/679,645
/ FILING DATE: July 12, 1996
/ CLASSIFICATION: 800
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 60/001,135
/ FILING DATE: July 13, 1995
/ APPLICATION NUMBER: 08/300,726
/ FILING DATE: September 2, 1994
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Warburg, Richard J.
/ REGISTRATION NUMBER: 32,327
/ REFERENCE/DOCKET NUMBER: 219/247
/ TELEPHONE: (213) 489-1600
/ TELEFAX: (213) 955-0440
/ TELEX: 67-3510
/ INFORMATION FOR SEQ ID NO: 826:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 17 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ US-08-679-645-826

Query Match 3.1%; Score 13.8; DB 1;
Best Local Similarity 64.7%; Pred. No. 1.9e+02;
Matches 11; Conservative 4; Mismatches 2;

Qy 106 CGCTGACTTTCAGCGG 122
Db 1 CGCGCCUUUACGCGG 17

RESULT 185
US-08-679-645-571
/ Sequence 571, Application US/08579645
/ Patent No. 6350934
/ GENERAL INFORMATION:
/ APPLICANT: Zwick, Michael G.
/ APPLICANT: Edington, Brent E.
/ APPLICANT: McSwiggen, James A.
/ APPLICANT: Merlo, Patricia Ann Owens
/ APPLICANT: Guo, Lining
/ APPLICANT: Skokut, Thomas A.
/ APPLICANT: Young, Scott A.
/ APPLICANT: Folkerts, Otto
/ APPLICANT: Merlo, Donald J.
/ TITLE OF INVENTION: COMPOSITION AND METHODS FOR
/ TITLE OF INVENTION: MODULATION OF GENE EXPRESSION
/ NUMBER OF SEQUENCES: 1263
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Lyon & Lyon
/ STREET: 633 West Fifth Street
/ STREET: Suite 4700

```

```

; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; MEDIUM TYPE: storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/679,645
; FILING DATE: July 12, 1996
; CLASSIFICATION: 800
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/001,135
; FILING DATE: July 13, 1995
; APPLICATION NUMBER: 08/300,726
; FILING DATE: September 2, 1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 219/247
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 571:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 18 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-679-645-571

Query Match 3.1%; Score 13.8; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 2e+02; Indels 0; Gaps 0;
Matches 14; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 134 CGGCTCGCGCTTCCA 150
Db 2 CGGCCUGCGCGCGCCA 18

RESULT 186
US-09-586-376-11
; Sequence 11, Application US/09586376
; Patent No. 6492115
; GENERAL INFORMATION:
; APPLICANT: Guida, Marco
; TITLE OF INVENTION: GENETIC TYPING OF THE HUMAN CYTOCHROME P450 2A6 GENE
; FILE REFERENCE: 4389-20
; CURRENT APPLICATION NUMBER: US/09/586,376
; CURRENT FILING DATE: 2000-06-02
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 11
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-586-376-11

Query Match 3.0%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2e+02; Indels 1; Gaps 0;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 41 TTGTCTAACCCCTAA 55
Db 3 TTGTCTTACCCCTAA 17

RESULT 187
US-09-586-376-12
; Sequence 12, Application US/09586376
; Patent No. 6492115
; GENERAL INFORMATION:
; APPLICANT: Guida, Marco
; TITLE OF INVENTION: GENETIC TYPING OF THE HUMAN CYTOCHROME P450 2A6 GENE
; FILE REFERENCE: 4389-20
; CURRENT APPLICATION NUMBER: US/09/586,376
; CURRENT FILING DATE: 2000-06-02
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 12
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-586-376-12

Query Match 3.0%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2e+02; Indels 1; Gaps 0;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 41 TTGTCTAACCCCTAA 55
Db 3 TTGTCTTACCCCTAA 17

RESULT 188
US-09-371-772B-4559
; Sequence 4559, Application US/09371772B
; Patent No. 6566127
; GENERAL INFORMATION:
; APPLICANT: Ribozyne Pharmaceuticals, Inc.
; APPLICANT: Pavco, Pam
; APPLICANT: McSwiggen, Jim
; APPLICANT: Stinchcomb, Dan
; APPLICANT: Escobedo, Jaime
; TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re
; FILE REFERENCE: MBH00.876-J (237/198)
; CURRENT APPLICATION NUMBER: US/09/371,772B
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: US 60/005,974
; PRIOR FILING DATE: 1995-10-26
; PRIOR APPLICATION NUMBER: US 08/584,040
; PRIOR FILING DATE: 1996-01-08
; NUMBER OF SEQ ID NOS: 14225
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 4559
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-371-772B-4559

Query Match 3.0%; Score 13.4; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 2e+02; Indels 1; Gaps 0;
Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 164 AGCAACACAAAAATG 178
Db 2 AGCAAGCAAAAAAUG 16

RESULT 189
US-10-232-634-11
; Sequence 11, Application US/10232634
; Patent No. 6797477
; GENERAL INFORMATION:
; APPLICANT: Guida, Marco
; TITLE OF INVENTION: GENETIC TYPING OF THE HUMAN CYTOCHROME P450 2A6 GENE
; APPLICANT: Hall, Jeff
; FILE REFERENCE: 4389-20
; CURRENT APPLICATION NUMBER: US/09/586,376
; CURRENT FILING DATE: 2000-06-02
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 11
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-586-376-11

Query Match 3.0%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2e+02; Indels 1; Gaps 0;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 41 TTGTCTAACCCCTAA 55
Db 3 TTGTCTTACCCCTAA 17
```

;  
; TITLE OF INVENTION: AND RELATED MATERIALS AND METHODS  
; FILE REFERENCE: 4389-20  
; CURRENT APPLICATION NUMBER: US/10/232,634  
; CURRENT FILING DATE: 2002-08-30  
; PRIOR APPLICATION NUMBER: US/09/586,376  
; PRIOR FILING DATE: 2000-06-02  
; NUMBER OF SEQ ID NOS: 29  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 11  
; LENGTH: 17  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-10-232-634-11

Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 41 TTTGCTCAACCTAA 55  
|||||  
Db 3 TTTGCTCAACCTAA 17

## RESULT 190

US-10-232-634-12  
; Sequence 12, Application US/10232634  
; Patent No. 6797477  
; GENERAL INFORMATION:  
; APPLICANT: Guida, Marco  
; APPLICANT: Hall, Jeff  
; TITLE OF INVENTION: GENETIC TYPING OF THE HUMAN CYTOCHROME P450 2A6 GENE  
; FILE REFERENCE: 4389-20  
; CURRENT APPLICATION NUMBER: US/10/232,634  
; CURRENT FILING DATE: 2002-08-30  
; PRIOR APPLICATION NUMBER: US/09/586,376  
; PRIOR FILING DATE: 2000-06-02  
; NUMBER OF SEQ ID NOS: 29  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 12  
; LENGTH: 17  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-10-232-634-12

Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 41 TTTGCTCAACCTAA 55  
|||||  
Db 3 TTTGCTCAACCTAA 17

## RESULT 191

US-08-630-019A-11/c  
; Sequence 11, Application US/08630019A  
; Patent No. 6015710  
; GENERAL INFORMATION:  
; APPLICANT: Shay, Jerry W.  
; APPLICANT: Wright, Woodring E.  
; APPLICANT: Piatyszek, Mieczyslaw A.  
; APPLICANT: Corey, David  
; APPLICANT: No. 6015710ton, James C.  
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
; NUMBER OF SEQUENCES: 46  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA

ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/630,019A  
; FILING DATE: 09-JUN-1996  
; CLASSIFICATION: 536  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001600US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 11:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 13 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: other nucleic acid  
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
; DESCRIPTION: where (deoxy)ribose-phosphate linkages are replaced by  
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
; DESCRIPTION: glycine amino nitrogen through a methylenecarbonyl linker"  
US-08-630-019A-11

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCTTAACGTG 58  
|||||  
Db 13 CTAACCTTAACGTG 1

## RESULT 192

US-08-630-019A-15/c  
; Sequence 15, Application US/08630019A  
; Patent No. 6015710  
; GENERAL INFORMATION:  
; APPLICANT: Shay, Jerry W.  
; APPLICANT: Wright, Woodring E.  
; APPLICANT: Piatyszek, Mieczyslaw A.  
; APPLICANT: Corey, David  
; APPLICANT: No. 6015710ton, James C.  
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
; TITLE OF INVENTION: Peptide Nucleic Acids  
; NUMBER OF SEQUENCES: 46  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
ZIP: 94111-3834

; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/630,019A  
; FILING DATE: 09-JUN-1996  
; CLASSIFICATION: 536  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001600US  
; TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 15:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 13 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
DESCRIPTION: where (deoxy)ribose-phosphate linkages are replaced by  
DESCRIPTION: N-(2-aminethyl)glycine units linked to nucleotide bases via  
DESCRIPTION: glycine amino nitrogen through a methylenecarbonyl linker"  
US-08-630-019A-15

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 44 GTCTAACCTTAAC 56  
| | | | | | | | | | | | | | |  
Db 13 GTCTAACCTTAAC 1

RESULT 193  
US-08-630-019A-17/c  
Sequence 17, Application US/08630019A  
Patent No. 6015710  
GENERAL INFORMATION:  
APPLICANT: Shay, Jerry W.  
APPLICANT: Wright, Woodring E.  
APPLICANT: Piatyszek, Mieczyslaw A.  
APPLICANT: Corey, David  
APPLICANT: No. 6015710ton, James C.  
TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
TITLE OF INVENTION: Peptide Nucleic Acids  
NUMBER OF SEQUENCES: 46  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/630,019A  
FILING DATE: 09-JUN-1996  
CLASSIFICATION: 536  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-0016000US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 17:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 13 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
DESCRIPTION: where (deoxy)ribose-phosphate linkages are replaced by  
DESCRIPTION: N-(2-aminethyl)glycine units linked to nucleotide bases via  
DESCRIPTION: glycine amino nitrogen through a methylenecarbonyl linker"  
US-08-630-019A-17

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 42 TTGCTAACCCCTA 54  
| | | | | | | | | | | | | | |  
Db 13 TTGCTAACCCCTA 1

RESULT 194  
US-08-630-019A-41/c  
Sequence 41, Application US/08630019A  
Patent No. 6015710  
GENERAL INFORMATION:  
APPLICANT: Shay, Jerry W.  
APPLICANT: Wright, Woodring E.  
APPLICANT: Piatyszek, Mieczyslaw A.  
APPLICANT: Corey, David  
APPLICANT: No. 6015710ton, James C.  
TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
TITLE OF INVENTION: Peptide Nucleic Acids  
NUMBER OF SEQUENCES: 46  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/630,019A  
FILING DATE: 09-JUN-1996  
CLASSIFICATION: 536  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-0016000US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 41:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 13 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
DESCRIPTION: /desc = "phosphorothioate (PS) nucleic acid"  
US-08-630-019A-41

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGCTAACCCCTA 54  
| | | | | | | | | | | | | | |  
Db 13 TTGCTAACCCCTA 1

RESULT 195  
US-08-638-545-1/c  
Sequence 1, Application US/08838545  
Patent No. 6046307  
GENERAL INFORMATION:  
APPLICANT: Shay, Jerry W.  
APPLICANT: Wright, Woodring E.  
APPLICANT: Piatyszek, Mieczyslaw A.  
APPLICANT: Corey, David R.

APPLICANT: No. 6046307ton, James C.  
TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
TITLE OF INVENTION: Peptide Nucleic Acids  
NUMBER OF SEQUENCES: 60  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/838,545  
FILING DATE: 09-APR-1997  
CLASSIFICATION: 536  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/630,019  
FILING DATE: 09-APR-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-001610US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 13 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by  
DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
DESCRIPTION: glycine amino N through a methylenecarbonyl linker"  
US-08-838-545-1

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAAGT 58  
Db 13 CTAACCCCTAAGT 1

## RESULT 196

US-08-838-545-4/c

Sequence 4, Application US/08838545

Patent No. 6046307

GENERAL INFORMATION:

APPLICANT: Shay, Jerry W.

APPLICANT: Wright, Woodring E.

APPLICANT: Piatyszek, Mieczyslaw A.

APPLICANT: Corey, David R.

APPLICANT: No. 6046307ton, James C.

TITLE OF INVENTION: Modulation of Mammalian Telomerase by

TITLE OF INVENTION: Peptide Nucleic Acids

NUMBER OF SEQUENCES: 60

CORRESPONDENCE ADDRESS:

ADDRESSEE: Townsend and Townsend and Crew LLP

STREET: Two Embarcadero Center, Eighth Floor

CITY: San Francisco

STATE: California

COUNTRY: USA

ZIP: 94111-3834

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/838,545  
FILING DATE: 09-APR-1997  
CLASSIFICATION: 536  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/630,019  
FILING DATE: 09-APR-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-001610US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 13 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by  
DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
DESCRIPTION: glycine amino N through a methylenecarbonyl linker"  
US-08-838-545-4

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGTCTAACCCCTA 54  
Db 13 TTGTCTAACCCCTA 1

## RESULT 197

US-08-838-545-12/c

Sequence 12, Application US/08838545

Patent No. 6046307

GENERAL INFORMATION:

APPLICANT: Shay, Jerry W.

APPLICANT: Wright, Woodring E.

APPLICANT: Piatyszek, Mieczyslaw A.

APPLICANT: Corey, David R.

APPLICANT: No. 6046307ton, James C.

TITLE OF INVENTION: Modulation of Mammalian Telomerase by

TITLE OF INVENTION: Peptide Nucleic Acids

NUMBER OF SEQUENCES: 60

CORRESPONDENCE ADDRESS:

ADDRESSEE: Townsend and Townsend and Crew LLP

STREET: Two Embarcadero Center, Eighth Floor

CITY: San Francisco

STATE: California

COUNTRY: USA

ZIP: 94111-3834

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/838,545

FILING DATE: 09-APR-1997

CLASSIFICATION: 536

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/630,019

FILING DATE: 09-APR-1996

ATTORNEY/AGENT INFORMATION:

```
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 12:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),
; where (deoxy(ribose-phosphate linkages are replaced by
; N-(2-aminoethyl)glycine units linked to nucleotide bases via
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"
US-08-838-545-12

Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 44 GTCTAACCCCTAAC 56
Db 13 GTCTAACCCCTAAC 1

RESULT 198
US-08-838-545-46/c
; Sequence 46, Application US/08838545
; Patent No. 6046307
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6046307ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; TITLE OF INVENTION: Peptide Nucleic Acids
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/838,545
; FILING DATE: 09-APR-1997
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/630,019
; FILING DATE: 09-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),
; where (deoxy(ribose-phosphate linkages are replaced by
; N-(2-aminoethyl)glycine units linked to nucleotide bases via
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"
US-08-838-545-51

Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 38 TTTTGTCTCTAAC 50
Db 13 TTTTGTCTCTAAC 1
```

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; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "phosphorothioate (PS)
; DESCRIPTION: nucleic acid"
US-08-838-545-46

Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGCTAACCCCTA 54
Db 13 TTGCTAACCCCTA 1

RESULT 199
US-08-838-545-51/c
; Sequence 51, Application US/08838545
; Patent No. 6046307
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6046307ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; TITLE OF INVENTION: Peptide Nucleic Acids
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/838,545
; FILING DATE: 09-APR-1997
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/630,019
; FILING DATE: 09-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 51:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),
; where (deoxy(ribose-phosphate linkages are replaced by
; N-(2-aminoethyl)glycine units linked to nucleotide bases via
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"
US-08-838-545-51

Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 38 TTTTGTCTCTAAC 50
Db 13 TTTTGTCTCTAAC 1
```

```
RESULT 200
US-08-838-545-52/c
; Sequence 52, Application US/08838545
; Patent No. 6046307
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6046307ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; TITLE OF INVENTION: Peptide Nucleic Acids
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/838,545
; FILING DATE: 09-APR-1997
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/630,019
; FILING DATE: 09-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 52:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"
US-08-838-545-52

Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 53 TTAACGTGAGAAGG 65
Db 13 TTAACGTGAGAAGG 1

RESULT 202
US-08-838-545-56/c
; Sequence 56, Application US/08838545
; Patent No. 6046307
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6046307ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; TITLE OF INVENTION: Peptide Nucleic Acids
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; INFORMATION FOR SEQ ID NO: 55:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"
US-08-838-545-55

Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 53 TTAACGTGAGAAGG 65
Db 13 TTAACGTGAGAAGG 1

RESULT 203
US-08-838-545-55/c
; Sequence 55, Application US/08838545
; Patent No. 6046307
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6046307ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; TITLE OF INVENTION: Peptide Nucleic Acids
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
```



```
;
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; TELECOMMUNICATION INFORMATION:
; APPLICATION NUMBER: US/08/838,545
; FILING DATE: 09-APR-1997
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/630,019
; FILING DATE: 09-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 56:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"
; US-08-838-545-56

Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 55 ACTGAGAAGGCG 67
Db 13 ACTGAGAAGGCG 1

RESULT 203
US-09-349-532-1/C
; Sequence 1, Application US/09349532
; Patent No. 6294650
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6294650ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/349,532
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/838,545
; FILING DATE: 09-APR-1997
; OPERATING SYSTEM: IBM PC compatible
; APPLICATION NUMBER: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/349,532
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/838,545
; FILING DATE: 09-APR-1997
; APPLICATION NUMBER: US 08/630,019
; FILING DATE: 09-APR-1996
```

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;
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"
; US-09-349-532-1

Query Match 2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAATCG 58
Db 13 CTAACCCCTAATCG 1

RESULT 204
US-09-349-532-4/C
; Sequence 4, Application US/09349532
; Patent No. 6294650
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6294650ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/349,532
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/838,545
; FILING DATE: 09-APR-1997
; OPERATING SYSTEM: IBM PC compatible
; APPLICATION NUMBER: US 08/630,019
; FILING DATE: 09-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 13 base pairs
```

;  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: other nucleic acid  
; DESCRIPTION: /desc = "peptide nucleic acid (PNA)",  
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by  
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"  
US-09-349-532-4

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGTCTAACCCCTA 54  
| | | | | | | | | |  
Db 13 TTGTCTAACCCCTA 1

RESULT 205  
US-09-349-532-12/c  
; Sequence 12, Application US/09349532  
; Patent No. 6294650  
; GENERAL INFORMATION:  
; APPLICANT: Shay, Jerry W.  
; APPLICANT: Wright, Woodring E.  
; APPLICANT: Piatyszek, Mieczyslaw A.  
; APPLICANT: Corey, David R.  
; APPLICANT: No. 6294650ton, James C.  
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
; TITLE OF INVENTION: Peptide Nucleic Acids  
; NUMBER OF SEQUENCES: 60  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/349,532  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/838,545  
; FILING DATE: 09-APR-1997  
; APPLICATION NUMBER: US 08/630,019  
; FILING DATE: 09-APR-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001610US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 12:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 13 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: other nucleic acid  
; DESCRIPTION: /desc = "peptide nucleic acid (PNA)",  
; DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by  
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
; DESCRIPTION: glycine amino N through a methylenecarbonyl linker"  
US-09-349-532-12

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 44 GTCTAACCCCTAAC 56  
| | | | | | | | | |  
Db 13 GTCTAACCCCTAAC 1

RESULT 206  
US-09-349-532-46/c  
; Sequence 46, Application US/09349532  
; Patent No. 6294650  
; GENERAL INFORMATION:  
; APPLICANT: Shay, Jerry W.  
; APPLICANT: Wright, Woodring E.  
; APPLICANT: Piatyszek, Mieczyslaw A.  
; APPLICANT: Corey, David R.  
; APPLICANT: No. 6294650ton, James C.  
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
; TITLE OF INVENTION: Peptide Nucleic Acids  
; NUMBER OF SEQUENCES: 60  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/349,532  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/838,545  
; FILING DATE: 09-APR-1997  
; APPLICATION NUMBER: US 08/630,019  
; FILING DATE: 09-APR-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-001610US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 46:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 13 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: other nucleic acid  
; DESCRIPTION: /desc = "phosphorothioate (PS)  
; DESCRIPTION: nucleic acid"  
US-09-349-532-46

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGTCTAACCCCTA 54  
| | | | | | | | | |  
Db 13 TTGTCTAACCCCTA 1

RESULT 207  
US-09-349-532-51/c  
; Sequence 51, Application US/09349532

Patent No. 6294650  
GENERAL INFORMATION:  
APPLICANT: Shay, Jerry W.  
APPLICANT: Wright, Woodring E.  
APPLICANT: Piatyszek, Mieczyslaw A.  
APPLICANT: Corey, David R.  
APPLICANT: No. 6294650ton, James C.  
TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
TITLE OF INVENTION: Peptide Nucleic Acids  
NUMBER OF SEQUENCES: 60  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/349,532  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/838,545  
FILING DATE: 09-APR-1997  
APPLICATION NUMBER: US 08/630,019  
FILING DATE: 09-APR-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-001610US  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 51:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 13 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by  
DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
DESCRIPTION: glycine amino N through a methylenecarbonyl linker"  
US-09-349-532-51  
Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Oy 38 TTTTGTCTAAC 50  
Db 13 TTTTGTCTAAC 1  
RESULT 208  
US-09-349-532-52/c  
Sequence 52, Application US/09349532  
Patent No. 6294650  
GENERAL INFORMATION:  
APPLICANT: Shay, Jerry W.  
APPLICANT: Wright, Woodring E.  
APPLICANT: Piatyszek, Mieczyslaw A.  
APPLICANT: Corey, David R.  
APPLICANT: No. 6294650ton, James C.  
TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
TITLE OF INVENTION: Peptide Nucleic Acids  
NUMBER OF SEQUENCES: 60

CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/349,532  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/838,545  
FILING DATE: 09-APR-1997  
APPLICATION NUMBER: US 08/630,019  
FILING DATE: 09-APR-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-001610US  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 52:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 13 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
DESCRIPTION: /desc = "peptide nucleic acid (PNA),  
DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by  
DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via  
DESCRIPTION: glycine amino N through a methylenecarbonyl linker"  
US-09-349-532-52  
Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.7e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Oy 39 TTTTGTCTAAC 51  
Db 13 TTTTGTCTAAC 1  
RESULT 209  
US-09-349-532-55/c  
Sequence 55, Application US/09349532  
Patent No. 6294650  
GENERAL INFORMATION:  
APPLICANT: Shay, Jerry W.  
APPLICANT: Wright, Woodring E.  
APPLICANT: Piatyszek, Mieczyslaw A.  
APPLICANT: Corey, David R.  
APPLICANT: No. 6294650ton, James C.  
TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
TITLE OF INVENTION: Peptide Nucleic Acids  
NUMBER OF SEQUENCES: 60  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/349,532

FILING DATE: 09-APR-1996  
CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/838,545

FILING DATE: 09-APR-1997

APPLICATION NUMBER: US 08/630,019

FILING DATE: 09-APR-1996

ATTORNEY/AGENT INFORMATION:

NAME: Storella, John R.

REGISTRATION NUMBER: 32,944

REFERENCE/DOCKET NUMBER: 015389-001610US

TELEPHONE: (415) 576-0200

TELEFAX: (415) 576-0300

INFORMATION FOR SEQ ID NO: 55:

SEQUENCE CHARACTERISTICS:

LENGTH: 13 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: other nucleic acid

DESCRIPTION: /desc = "peptide nucleic acid (PNA),

DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by

DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via

DESCRIPTION: glycine amino N through a methylenecarbonyl linker"

US-09-349-532-55

Query Match 2.9%; Score 13; DB 1; Length 13;

Best Local Similarity 100.0%; Pred. No. 1.7e+02;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 53 TAACTGAGAGGG 65

Db 13 TAACTGAGAGGG 1

RESULT 210

US-09-349-532-56/c

Sequence 56, Application US/09349532

Patent No. 6294650

GENERAL INFORMATION:

APPLICANT: Shay, Jerry W.

APPLICANT: Wright, Woodring E.

APPLICANT: Piatyszek, Mieczyslaw A.

APPLICANT: Corey, David R.

APPLICANT: No. 6294650ton, James C.

TITLE OF INVENTION: Modulation of Mammalian Telomerase by

TITLE OF INVENTION: Peptide Nucleic Acids

NUMBER OF SEQUENCES: 60

CORRESPONDENCE ADDRESS:

ADDRESSEE: Townsend and Townsend and Crew LLP

STREET: Two Embarcadero Center, Eighth Floor

CITY: San Francisco

STATE: California

COUNTRY: USA

ZIP: 94111-3834

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/349,532

FILING DATE:

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/838,545

FILING DATE: 09-APR-1997

APPLICATION NUMBER: US 08/630,019

FILING DATE: 09-APR-1996

ATTORNEY/AGENT INFORMATION:

NAME: Storella, John R.

REGISTRATION NUMBER: 32,944

REFERENCE/DOCKET NUMBER: 015389-001610US

TELEPHONE: (415) 576-0200

TELEFAX: (415) 576-0300

INFORMATION FOR SEQ ID NO: 56:

SEQUENCE CHARACTERISTICS:

LENGTH: 13 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: other nucleic acid

DESCRIPTION: /desc = "peptide nucleic acid (PNA),

DESCRIPTION: where (deoxy(ribose-phosphate linkages are replaced by

DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via

DESCRIPTION: glycine amino N through a methylenecarbonyl linker"

US-09-349-532-56

Query Match 2.9%; Score 13; DB 1; Length 13;

Best Local Similarity 100.0%; Pred. No. 1.7e+02;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 55 ACTGAGAGGGCG 67

Db 13 ACTGAGAGGGCG 1

RESULT 211

US-09-657-445A-2/c

Sequence 2, Application US/09657445A

Patent No. 6608036

GENERAL INFORMATION:

APPLICANT: Geron Corporation

APPLICANT: Gryaznov, Sergei

APPLICANT: Pongracz, Krisztina

APPLICANT: Matray, Tracey

TITLE OF INVENTION: Oligonucleotide N3'-P5' Thiophosphoramidates: Their Synthesis and

FILE REFERENCE: 039/003

CURRENT APPLICATION NUMBER: US/09/657,445A

CURRENT FILING DATE: 2000-09-09

PRIOR APPLICATION NUMBER: US 60/153,201

PRIOR FILING DATE: 1999-09-10

PRIOR APPLICATION NUMBER: US 60/160,444

PRIOR FILING DATE: 1999-10-19

NUMBER OF SEQ ID NOS: 9

SOFTWARE: PatentIn version 3.1

SEQ ID NO 2

LENGTH: 13

TYPE: DNA

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Synthetic oligonucleotide with potential inhibition activity

US-09-657-445A-2

Query Match 2.9%; Score 13; DB 1; Length 13;

Best Local Similarity 100.0%; Pred. No. 1.7e+02;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGTCTAACCCCTA 54

Db 13 TTGTCTAACCCCTA 1

RESULT 212

US-09-657-445A-8/c

Sequence 8, Application US/09657445A

Patent No. 6608036

GENERAL INFORMATION:

APPLICANT: Geron Corporation

APPLICANT: Gryaznov, Sergei

```
; APPLICANT: Pongracz, Krisztina
; APPLICANT: Matray, Tracey
; TITLE OF INVENTION: Oligonucleotide N3'-p5' Thiophosphoramidates: Their Synthesis and
; FILE REFERENCE: 039/003
; CURRENT APPLICATION NUMBER: US/09/657,445A
; CURRENT FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: US 60/153,201
; PRIOR FILING DATE: 1999-09-10
; PRIOR APPLICATION NUMBER: US 60/160,444
; PRIOR FILING DATE: 1999-10-19
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 8
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide with potential inhibition activity
US-09-657-445A-8

Query Match      2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      46 CTAACCCCTAACTG 58
Db      13 CTAACCCCTAACTG 1

RESULT 213
US-10-463-076-2/c
; Sequence 2, Application US/10463076
; Patent No. 6835826
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
; APPLICANT: Gryaznov, Sergei
; APPLICANT: Pongracz, Krisztina
; APPLICANT: Matray, Tracey
; TITLE OF INVENTION: Oligonucleotide N3'-p5' Thiophosphoramidates: Their Synthesis and
; FILE REFERENCE: 039/004C
; CURRENT APPLICATION NUMBER: US/10/463,076
; CURRENT FILING DATE: 2003-06-17
; PRIOR APPLICATION NUMBER: US 09/657,445
; PRIOR FILING DATE: 2000-09-08
; PRIOR APPLICATION NUMBER: US 60/153,201
; PRIOR FILING DATE: 1999-09-10
; PRIOR APPLICATION NUMBER: US 60/160,444
; PRIOR FILING DATE: 1999-10-19
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide with potential inhibition activity
US-10-463-076-2

Query Match      2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      42 TTGTCCTAACCTTA 54
Db      13 TTGTCCTAACCTTA 1

RESULT 214
US-10-463-076-8/c
; Sequence 8, Application US/10463076
; Patent No. 6835826
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
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; APPLICANT: Gryaznov, Sergei
; APPLICANT: Pongracz, Krisztina
; APPLICANT: Matray, Tracey
; TITLE OF INVENTION: Oligonucleotide N3'-p5' Thiophosphoramidates: Their Synthesis and
; FILE REFERENCE: 039/004C
; CURRENT APPLICATION NUMBER: US/10/463,076
; CURRENT FILING DATE: 2003-06-17
; PRIOR APPLICATION NUMBER: US 09/657,445
; PRIOR FILING DATE: 2000-09-08
; PRIOR APPLICATION NUMBER: US 60/153,201
; PRIOR FILING DATE: 1999-09-10
; PRIOR APPLICATION NUMBER: US 60/160,444
; PRIOR FILING DATE: 1999-10-19
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 8
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide with potential inhibition activity
US-10-463-076-8

Query Match      2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      46 CTAACCCCTAACTG 58
Db      13 CTAACCCCTAACTG 1

RESULT 215
US-08-301-435-34
; Sequence 34, Application US/08301435
; Patent No. 6592873
; GENERAL INFORMATION:
; APPLICANT: PAUL, PREM S.
; APPLICANT: MENG, XIANG-JIN
; APPLICANT: HALBUR, PATRICK G.
; APPLICANT: MOROZOV, IGOR
; APPLICANT: LUM, MELISSA A.
; TITLE OF INVENTION: A POLYNUCLEIC ACID ISOLATED FROM A
; TITLE OF INVENTION: PORCINE REPRODUCTIVE AND RESPIRATORY SYNDROME VIRUS (PRRSV),
; TITLE OF INVENTION: A PROTEIN ENCODED BY THE POLYNUCLEIC ACID, A VACCINE
; TITLE OF INVENTION: PREPARED FROM OR CONTAINING THE POLYNUCLEIC ACID OR
; TITLE OF INVENTION: PROTEIN,
; NUMBER OF SEQUENCES: 77
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,
; ADDRESSEE: P.C.
; STREET: 1755 S. Jefferson Davis Highway, Suite 400
; CITY: Arlington
; STATE: Virginia
; COUNTRY: U.S.A.
; ZIP: 22202
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/301,435
; FILING DATE:
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/131,625
; FILING DATE: 05-OCT-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Lavalleye, Jean-Paul M.P.
; REGISTRATION NUMBER: 31,451
; REFERENCE/DOCKET NUMBER: 4625-021-55X CIP
; TELECOMMUNICATION INFORMATION:
```

/ TELEPHONE: (703) 413-3000  
/ TELEFAX: (703) 413-2220  
/ TELEX: 248855 OPAT UR  
/ INFORMATION FOR SEQ ID NO: 34:  
/ SEQUENCE CHARACTERISTICS:  
/ LENGTH: 16 base pairs  
/ TYPE: nucleic acid  
/ STRANDEDNESS: unknown  
/ TOPOLOGY: linear  
/ MOLECULE TYPE: DNA (genomic)  
US-08-301-435-34

Query Match 2.9%; Score 13; DB 1; Length 16;  
Best Local Similarity 100.0%; Pred. No. 2.1e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 268 GGGGCTTCTCCGG 280  
Db 4 GGGGCTTCTCCGG 16

## RESULT 216

PCT-US95-10904-34  
/ Sequence 34, Application PC/TUS9510904  
/ GENERAL INFORMATION:  
/ APPLICANT: PAUL, PREM S.  
/ APPLICANT: MENG, XIANG-JIN  
/ APPLICANT: HALBUR, PATRICK G.  
/ APPLICANT: MOROZOV, IGOR  
/ APPLICANT: LUM, MELISSA A.  
/ TITLE OF INVENTION: A POLYNUCLEIC ACID ISOLATED FROM A  
/ TITLE OF INVENTION: PORCINE REPRODUCTIVE AND RESPIRATORY SYNDROME VIRUS (PRRSV),  
/ TITLE OF INVENTION: A PROTEIN ENCODED BY THE POLYNUCLEIC ACID, A VACCINE  
/ TITLE OF INVENTION: PREPARED FROM OR CONTAINING THE POLYNUCLEIC ACID OR  
/ TITLE OF INVENTION: PROTEIN,  
/ NUMBER OF SEQUENCES: 77  
/ CORRESPONDENCE ADDRESS:  
/ ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,  
/ ADDRESSEE: P.C.  
/ STREET: 1755 S. Jefferson Davis Highway, Suite 400  
/ CITY: Arlington  
/ STATE: Virginia  
/ COUNTRY: U.S.A.  
/ ZIP: 22202

/ COMPUTER READABLE FORM:  
/ MEDIUM TYPE: Floppy disk  
/ COMPUTER: IBM PC compatible  
/ OPERATING SYSTEM: PC-DOS/MS-DOS  
/ SOFTWARE: PatentIn Release #1.0, Version #1.25  
/ CURRENT APPLICATION DATA:  
/ APPLICATION NUMBER: PCT/US95/10904  
/ FILING DATE:  
/ CLASSIFICATION:  
/ PRIOR APPLICATION DATA:  
/ APPLICATION NUMBER: US 08/131,625  
/ FILING DATE: 05-OCT-1993  
/ ATTORNEY/AGENT INFORMATION:  
/ NAME: Lavalleye, Jean-Paul M.P.  
/ REGISTRATION NUMBER: 31,451  
/ REFERENCE/DOCKET NUMBER: 4625-021-55X CIP  
/ TELECOMMUNICATION INFORMATION:  
/ TELEPHONE: (703) 413-3000  
/ TELEFAX: (703) 413-2220  
/ TELEX: 248855 OPAT UR

/ INFORMATION FOR SEQ ID NO: 34:  
/ SEQUENCE CHARACTERISTICS:  
/ LENGTH: 16 base pairs  
/ TYPE: nucleic acid  
/ STRANDEDNESS: unknown  
/ TOPOLOGY: linear  
/ MOLECULE TYPE: DNA (genomic)  
PCT-US95-10904-34

Query Match 2.9%; Score 13; DB 1; Length 16;  
Best Local Similarity 100.0%; Pred. No. 2.1e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 268 GGGGCTTCTCCGG 280  
Db 4 GGGGCTTCTCCGG 16

## RESULT 217

US-08-679-645-828  
/ Sequence 828, Application US/08679645  
/ Patent No. 6350934  
/ GENERAL INFORMATION:  
/ APPLICANT: Zwick, Michael G.  
/ APPLICANT: Edington, Brent E.  
/ APPLICANT: McSwiggen, James A.  
/ APPLICANT: Merlo, Patricia Ann Owens  
/ APPLICANT: Guo, Lining  
/ APPLICANT: Skokut, Thomas A.  
/ APPLICANT: Young, Scott A.  
/ APPLICANT: Folkerts, Otto  
/ APPLICANT: Merlo, Donald J.  
/ TITLE OF INVENTION: COMPOSITION AND METHODS FOR  
/ TITLE OF INVENTION: MODULATION OF GENE EXPRESSION  
/ TITLE OF INVENTION: IN PLANTS  
/ NUMBER OF SEQUENCES: 1263  
/ CORRESPONDENCE ADDRESS:  
/ ADDRESSEE: Lyon & Lyon  
/ STREET: 633 West Fifth Street  
/ STREET: Suite 4700  
/ CITY: Los Angeles  
/ STATE: California  
/ COUNTRY: U.S.A.  
/ ZIP: 90071-2066

/ COMPUTER READABLE FORM:  
/ MEDIUM TYPE: 3.5" Diskette, 1.44 Mb  
/ MEDIUM TYPE: storage  
/ COMPUTER: IBM Compatible  
/ OPERATING SYSTEM: IBM P.C. DOS 5.0  
/ SOFTWARE: Word Perfect 5.1  
/ CURRENT APPLICATION DATA:  
/ APPLICATION NUMBER: US/08/679,645  
/ FILING DATE: July 12, 1996  
/ CLASSIFICATION: 800  
/ PRIOR APPLICATION DATA:  
/ APPLICATION NUMBER: 60/001,135  
/ FILING DATE: July 13, 1995  
/ APPLICATION NUMBER: 08/300,726  
/ FILING DATE: September 2, 1994  
/ ATTORNEY/AGENT INFORMATION:  
/ NAME: Warburg, Richard J.  
/ REGISTRATION NUMBER: 32,327  
/ REFERENCE/DOCKET NUMBER: 219/247  
/ TELECOMMUNICATION INFORMATION:  
/ TELEPHONE: (213) 489-1600  
/ TELEFAX: (213) 955-0440  
/ TELEX: 67-3510

/ INFORMATION FOR SEQ ID NO: 828:  
/ SEQUENCE CHARACTERISTICS:  
/ LENGTH: 17 base pairs  
/ TYPE: nucleic acid  
/ STRANDEDNESS: single  
/ TOPOLOGY: linear  
US-08-679-645-828

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 62.5%; Pred. No. 2.2e+02;  
Matches 10; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

Qy 107 GCTGACTTTCAGGGG 122  
Db 1 GCUGCCUUCAGCUGG 16

```
RESULT 218
US-09-220-510B-1
; Sequence 1, Application US/09220510B
; Patent No. 6440726
; GENERAL INFORMATION:
; APPLICANT: RESNICK, NITZAN
; TITLE OF INVENTION: EXPRESSION VECTORS COMPRISING MULTIPLE SHEAR STRESS
; TITLE OF INVENTION: RESPONSIVE ELEMENTS (SSRE) AND METHODS OF USE FOR
; TITLE OF INVENTION: TREATING DISORDERS RELATED TO VASCULOGENESIS AND/OR
; TITLE OF INVENTION: ANGIOGENESIS IN A SHEAR STRESS ENVIRONMENT
; FILE REFERENCE: P-2771-US
; CURRENT APPLICATION NUMBER: US/09/220,510B
; CURRENT FILING DATE: 1998-12-24
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial sequence:
; OTHER INFORMATION: A PDGF-A Shear Stress Response Element.
US-09-220-510B-1
Query Match 2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.2e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 333 GGGGGCGGCGGAGG 348
Db 1 GGGGGCGGCGGCGGG 16

RESULT 219
US-08-770-565-2
; Sequence 2, Application US/08770565
; Patent No. 5846723
; GENERAL INFORMATION:
; APPLICANT: Kim, Nam Woo
; APPLICANT: Wu, Fred
; APPLICANT: Kealey, James T.
; APPLICANT: Pruzan, Ronald
; APPLICANT: Weinrich, Scott L.
; TITLE OF INVENTION: Methods for Detecting the RNA Component of
; TITLE OF INVENTION: Telomerase
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/770,565
; FILING DATE: 20-DEC-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-0023000US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-576-0200
; TELEFAX: 415-576-0300
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 30 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; MOLECULE TYPE: DNA
US-08-770-565-2
Query Match 2.8%; Score 12.8; DB 1; Length 30;
Best Local Similarity 70.8%; Pred. No. 2.9e+02;
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

Qy 131 CCTCGCGCTCGCGCTTCCACCGT 154
Db 5 CCTCTCTCTCGCGCTTGAACGGT 28

RESULT 220
US-08-873-709-20
; Sequence 20, Application US/08873709
; Patent No. 6037126
; GENERAL INFORMATION:
; APPLICANT: Grossman, Abraham
; TITLE OF INVENTION: COMPOSITIONS, METHODS, KITS AND
; TITLE OF INVENTION: APPARATUS FOR DETERMINING THE PRESENCE OR ABSENCE OF
; TITLE OF INVENTION: PROTEIN COMPONENT OF TELOMERASE ENZYME
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Abraham Grossman
; STREET: 666 Washington Avenue
; CITY: Pleasantville
; STATE: NY
; COUNTRY: USA
; ZIP: 10570
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/873,709
; FILING DATE: 12-JUN-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Janiuk, Anthony J.
; REGISTRATION NUMBER: 29,809
; REFERENCE/DOCKET NUMBER: Q001/002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 914-747-9108
; INFORMATION FOR SEQ ID NO: 20:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 62 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; MOLECULE TYPE: DNA
US-08-873-709-20
Query Match 2.8%; Score 12.8; DB 1; Length 62;
Best Local Similarity 70.8%; Pred. No. 1.7e+02;
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

Qy 222 TCGCCTGCGCGCGCGCAACCCC 245
Db 38 TCCGAGCGCCACCCCTCCGCAACCC 61

RESULT 221
US-09-255-464B-16
; Sequence 16, Application US/09255464B
; Patent No. 6238867
; GENERAL INFORMATION:
; APPLICANT: Roninson, Igor
; APPLICANT: Grossman, Abraham
```

```

; TITLE OF INVENTION: Compositions, Methods, Kits and Apparatus for
; TITLE OF INVENTION: Identifying Naturally Occurring RNA Sequences Having
; TITLE OF INVENTION: Affinity for RNA-Binding Proteins
; FILE REFERENCE: Q001/004a
; CURRENT APPLICATION NUMBER: US/09/255,464B
; CURRENT FILING DATE: 1999-02-22
; PRIOR APPLICATION NUMBER: 60/075,495
; PRIOR FILING DATE: 1998-02-23
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 16
; LENGTH: 62
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-09-255-464B-16

Query Match      2.8%; Score 12.8; DB 1; Length 62;
Best Local Similarity 70.8%; Pred. No. 1.7e+02;
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY      222 TCGCCTGCCAGCCCGCAACCCC 245
Db      38  TCCAGGCCCAACCTCCGCAACCC 61

RESULT 222
US-08-873-709-19/c
; Sequence 19, Application US/08873709
; Patent No. 6037126
; GENERAL INFORMATION:
; APPLICANT: Grossman, Abraham
; TITLE OF INVENTION: COMPOSITIONS, METHODS, KITS AND
; TITLE OF INVENTION: APPARATUS FOR DETERMINING THE PRESENCE OR ABSENCE OF
; TITLE OF INVENTION: PROTEIN COMPONENT OF TELOMERASE ENZYME
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: Abraham Grossman
; STREET: 666 Washington Avenue
; CITY: Pleasantville
; STATE: NY
; COUNTRY: USA
; ZIP: 10570
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/873,709
; FILING DATE: 12-JUN-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Janiuk, Anthony J.
; REGISTRATION NUMBER: 29,809
; REFERENCE/DOCKET NUMBER: Q001/002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 914-747-9108
; INFORMATION FOR SEQ ID NO: 19:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 66 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-08-873-709-19

Query Match      2.8%; Score 12.8; DB 1; Length 66;
Best Local Similarity 70.8%; Pred. No. 1.6e+02;
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY      222 TCGCCTGCCAGCCCGCAACCCC 245
Db      29  TCCAGGCCCAACCTCCGCAACCC 6

TITLE OF INVENTION: Compositions, Methods, Kits and Apparatus for
TITLE OF INVENTION: Identifying Naturally Occurring RNA Sequences Having
FILE REFERENCE: Q001/004a
CURRENT APPLICATION NUMBER: US/09/255,464B
CURRENT FILING DATE: 1999-02-22
PRIOR APPLICATION NUMBER: 60/075,495
PRIOR FILING DATE: 1998-02-23
NUMBER OF SEQ ID NOS: 25
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 15
LENGTH: 66
TYPE: DNA
ORGANISM: Homo sapiens
US-09-255-464B-15

Query Match      2.8%; Score 12.8; DB 1; Length 66;
Best Local Similarity 70.8%; Pred. No. 1.6e+02;
Matches 17; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

QY      222 TCGCCTGCCAGCCCGCAACCCC 245
Db      29  TCCAGGCCCAACCTCCGCAACCC 6

RESULT 224
US-08-311-486C-658/c
; Sequence 658, Application US/08311486C
; Patent No. 5811300
; GENERAL INFORMATION:
; APPLICANT: Sean Sullivan
; APPLICANT: Kenneth Draper
; APPLICANT: Kevin Kisich
; APPLICANT: Dan T. Stinchcomb
; APPLICANT: James McSwiggen
; TITLE OF INVENTION: RIBOZYME TREATMENT OF
; TITLE OF INVENTION: DISEASES OR CONDITIONS
; TITLE OF INVENTION: RELATED TO LEVELS OF
; TITLE OF INVENTION: TNF-
; NUMBER OF SEQUENCES: 1157
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; CITY: Suite 4700
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; COMPUTER: IBM compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/311,486C
; FILING DATE: September 23, 1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; PRIOR APPLICATION DATA: including application
; PRIOR APPLICATION DATA: described below:
; APPLICATION NUMBER: 08/008,895
; FILING DATE: January 19, 1993
; APPLICATION NUMBER: 07/989,849
; two
```



```
; FILING DATE: December 7, 1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 209/166
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 658:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-311-486C-658

Query Match      2.7%; Score 12.4; DB 1; Length 15;
Best Local Similarity 92.9%; Pred. No. 2.1e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      302 AGAGTTGGGCTCTG 315
Db      15 AGAGTTGGACTCTG 2
      ||||| |||||

RESULT 225
US-09-328-174A-38/c
; Sequence 38, Application US/09328174A
; Patent No. 6448003
; GENERAL INFORMATION:
; APPLICANT: Guida, Marco
; APPLICANT: Kurth, Janice
; TITLE OF INVENTION: Genotyping Human Phenol Sulfotransferase
; FILE REFERENCE: 4389-6 (formerly SEQ-16P)
; CURRENT APPLICATION NUMBER: US/09/328,174A
; CURRENT FILING DATE: 1999-06-08
; PRIOR APPLICATION NUMBER: 09/328,174
; PRIOR FILING DATE: 1999-06-08
; NUMBER OF SEQ ID NOS: 110
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 38
; LENGTH: 16
; TYPE: DNA
; ORGANISM: H. sapiens
US-09-328-174A-38

Query Match      2.7%; Score 12.4; DB 1; Length 16;
Best Local Similarity 92.9%; Pred. No. 2.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      24 AGGGGTGGTGCCCA 37
Db      14 AGGGGTGGTGCTA 1
      ||||| |||||

RESULT 226
US-08-770-565-4/c
; Sequence 4, Application US/08770565
; Patent No. 5846723
; GENERAL INFORMATION:
; APPLICANT: Kim, Nam Woo
; APPLICANT: Wu, Fred
; APPLICANT: Kealey, James T.
; APPLICANT: Pruzan, Ronald
; APPLICANT: Weinrich, Scott L.
; TITLE OF INVENTION: Methods for Detecting the RNA Component of
; TITLE OF INVENTION: Telomerase
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP
; STREET: Two Embarcadero Center, 8th Floor
```

```
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/770,565
; FILING DATE: 20-DEC-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-002300US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-576-0200
; TELEFAX: 415-576-0300
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-08-770-565-4

Query Match      2.7%; Score 12; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      369 GGAAGAGGAACG 380
Db      12 GGAAGAGGAACG 1
      ||||| |||||

RESULT 227
US-08-630-019A-10/c
; Sequence 10, Application US/08630019A
; Patent No. 6015710
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David
; APPLICANT: No. 6015710ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; TITLE OF INVENTION: Peptide Nucleic Acids
; NUMBER OF SEQUENCES: 46
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/630,019A
; FILING DATE: 09-JUN-1996
; CLASSIFICATION: 536
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-001600US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
```

```

; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "peptide nucleic acid (PNA),
; DESCRIPTION: where (deoxy)ribose-phosphate linkages are replaced by
; DESCRIPTION: N-(2-aminoethyl)glycine units linked to nucleotide bases via
; DESCRIPTION: glycine amino nitrogen through a methylenecarbonyl linker"
US-08-630-019A-10

```

Query Match 2.7%; Score 12; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 1.8e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCTTAAC 57  
Db 12 CTAACCTTAAC 1

RESULT 228

```

US-08-838-545-8/c
; Sequence 8, Application US/08838545
; Patent No. 6046307
; GENERAL INFORMATION:
; APPLICANT: Shay, Jerry W.
; APPLICANT: Wright, Woodring E.
; APPLICANT: Piatyszek, Mieczyslaw A.
; APPLICANT: Corey, David R.
; APPLICANT: No. 6046307ton, James C.
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by
; TITLE OF INVENTION: Peptide Nucleic Acids
; NUMBER OF SEQUENCES: 60
; CORRESPONDENCE ADDRESS:
;

```

MOLECULE TYPE:	other nucleic acid	linear
DESCRIPTION:	/desc = "peptide nucleic acid (PNA),	
DESCRIPTION:	where (deoxy)ribose-phosphate linkages are replaced by	
DESCRIPTION:	N-(2-aminoethyl)glycine units linked to nucleotide bases via	
DESCRIPTION:	glycine amino N through a methylenecarbonyl linker"	

Db 12 CTAACCTAACT 1

US-08-838-545-8

Query Match 2.7%; Score 12; DB 1; Length 12;  
Best Local Similarity 100.0%; Pred. No. 1.8e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels

QY 46 CTAAACCTAACT 57  
|||  
Db 12 CTAAACCTAACT 1

RESULT 229

US-09-349-532-8/c  
; Sequence 8, Application US/09349532  
; Patent No. 6294650  
; GENERAL INFORMATION:  
; APPLICANT: Shay, Jerry W.  
; APPLICANT: Wright, Woodring E.  
; APPLICANT: Piatyszek, Mieczyslaw A.  
; APPLICANT: Corey, David R.  
; APPLICANT: No. 6294650ton, James C.  
; TITLE OF INVENTION: Modulation of Mammalian Telomerase by  
; TITLE OF INVENTION: Peptide Nucleic Acids  
; NUMBER OF SEQUENCES: 60  
; CORRESPONDENCE ADDRESS:

Query Match	2.7%	Score 12;	DB 1;	Length 12;
Best Local Similarity	100.0%	Pred. No. 1.8e+02;		
Matches 12;	Conservative	0;	Mismatches 0;	Indels 0;
			Gaps	0;

Qy	46	CTAACCCCTAACT	57
Db	12	CTAACCCCTAACT	1

## RESULT 230

US-08-292-620A-396/c  
; Sequence 396, Application US/08292620A  
; Patent No. 5837542  
; GENERAL INFORMATION:  
; APPLICANT: Susan Grimm  
; APPLICANT: Dan T. Stinchcomb  
; APPLICANT: James McSwiggen  
; APPLICANT: Sean Sullivan  
; APPLICANT: Kenneth G. Draper  
; TITLE OF INVENTION: RIBOZYME TREATMENT OF  
; TITLE OF INVENTION: DISEASES OR CONDITIONS  
; TITLE OF INVENTION: RELATED TO LEVELS OF  
; TITLE OF INVENTION: INTRACELLULAR ADHESION  
; TITLE OF INVENTION: MOLECULE-1 (I-CAM-1)  
; NUMBER OF SEQUENCES: 2390  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Lyon & Lyon  
; STREET: 633 West Fifth Street  
; STREET: Suite 4700  
; CITY: Los Angeles  
; STATE: California  
; COUNTRY: U.S.A.  
; ZIP: 90071-2066  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb  
; MEDIUM TYPE: storage  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: IBM P.C. DOS 5.0  
; SOFTWARE: Word Perfect 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/292.620A  
; FILING DATE: August 17, 1994  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA: including application  
; PRIOR APPLICATION DATA: described below:  
; APPLICATION NUMBER: 08/008,895  
; FILING DATE: January 19, 1993  
; APPLICATION NUMBER: 07/989,849  
; FILING DATE: December 7, 1992  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Warburg, Richard J.  
; REGISTRATION NUMBER: 32,327  
; REFERENCE/DOCKET NUMBER: 208/149  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (213) 489-1600  
; TELEFAX: (213) 955-0440  
; TELEX: 67-3510  
; INFORMATION FOR SEQ ID NO: 396:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-08-292-620A-396

Query Match 2.7%; Score 12; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 19 CTGGGAGGGGTG 30  
| | | | | | | | | |  
Db 12 CTGGGAGGGGTG 1

## RESULT 231

US-08-292-620A-591/c  
; Sequence 591, Application US/08292620A  
; Patent No. 5837542  
; GENERAL INFORMATION:  
; APPLICANT: Susan Grimm

; APPLICANT: Dan T. Stinchcomb  
; APPLICANT: James McSwiggen  
; APPLICANT: Sean Sullivan  
; APPLICANT: Kenneth G. Draper  
; TITLE OF INVENTION: RIBOZYME TREATMENT OF  
; TITLE OF INVENTION: DISEASES OR CONDITIONS  
; TITLE OF INVENTION: RELATED TO LEVELS OF  
; TITLE OF INVENTION: INTRACELLULAR ADHESION  
; TITLE OF INVENTION: MOLECULE-1 (I-CAM-1)  
; NUMBER OF SEQUENCES: 2390  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Lyon & Lyon  
; STREET: 633 West Fifth Street  
; STREET: Suite 4700  
; CITY: Los Angeles  
; STATE: California  
; COUNTRY: U.S.A.  
; ZIP: 90071-2066  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb  
; MEDIUM TYPE: storage  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: IBM P.C. DOS 5.0  
; SOFTWARE: Word Perfect 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/292,620A  
; FILING DATE: August 17, 1994  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA: including application  
; PRIOR APPLICATION DATA: described below:  
; APPLICATION NUMBER: 08/008,895  
; FILING DATE: January 19, 1993  
; APPLICATION NUMBER: 07/989,849  
; FILING DATE: December 7, 1992  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Warburg, Richard J.  
; REGISTRATION NUMBER: 32,327  
; REFERENCE/DOCKET NUMBER: 208/149  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (213) 489-1600  
; TELEFAX: (213) 955-0440  
; TELEX: 67-3510  
; INFORMATION FOR SEQ ID NO: 591:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-08-292-620A-591

Query Match 2.7%; Score 12; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 19 CTGGGAGGGGTG 30  
| | | | | | | | | |  
Db 12 CTGGGAGGGGTG 1

## RESULT 232

US-09-071-845-396/c  
; Sequence 396, Application US/09071845  
; Patent No. 6132967  
; GENERAL INFORMATION:  
; APPLICANT: Susan Grimm  
; APPLICANT: Dan T. Stinchcomb  
; APPLICANT: James McSwiggen  
; APPLICANT: Sean Sullivan  
; APPLICANT: Kenneth G. Draper  
; TITLE OF INVENTION: RIBOZYME TREATMENT OF  
; TITLE OF INVENTION: DISEASES OR CONDITIONS  
; TITLE OF INVENTION: RELATED TO LEVELS OF

/ TITLE OF INVENTION: INTRACELLULAR ADHESION  
/ TITLE OF INVENTION: MOLECULE-1 (I-CAM-1)  
/ NUMBER OF SEQUENCES: 2390  
/ CORRESPONDENCE ADDRESS:  
/ ADDRESSEE: Lyon & Lyon  
/ STREET: 633 West Fifth Street  
/ STREET: Suite 4700  
/ CITY: Los Angeles  
/ STATE: California  
/ COUNTRY: U.S.A.  
/ ZIP: 90071-2066  
/ COMPUTER READABLE FORM:  
/ MEDIUM TYPE: 3.5" Diskette, 1.44 Mb  
/ MEDIUM TYPE: storage  
/ COMPUTER: IBM Compatible  
/ OPERATING SYSTEM: IBM P.C. DOS 5.0  
/ SOFTWARE: Word Perfect 5.1  
/ CURRENT APPLICATION DATA:  
/ APPLICATION NUMBER: US/09/071,845  
/ FILING DATE:  
/ CLASSIFICATION:  
/ PRIOR APPLICATION DATA:  
/ APPLICATION NUMBER: US/08/292,620  
/ FILING DATE: August 17, 1994  
/ APPLICATION NUMBER: 08/008,895  
/ FILING DATE: January 19, 1993  
/ APPLICATION NUMBER: 07/989,849  
/ FILING DATE: December 7, 1992  
/ ATTORNEY/AGENT INFORMATION:  
/ NAME: Warburg, Richard J.  
/ REGISTRATION NUMBER: 32,327  
/ REFERENCE/DOCKET NUMBER: 208/149  
/ TELECOMMUNICATION INFORMATION:  
/ TELEPHONE: (213) 489-1600  
/ TELEFAX: (213) 955-0440  
/ TELEX: 67-3510  
/ INFORMATION FOR SEQ ID NO: 396:  
/ SEQUENCE CHARACTERISTICS:  
/ LENGTH: 15 base pairs  
/ TYPE: nucleic acid  
/ STRANDEDNESS: single  
/ TOPOLOGY: linear  
/ US-09-071-845-396

Query Match 2.7%; Score 12; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 19 CTGGGAGGGGTG 30  
|||||  
Db 12 CTGGGAGGGGTG 1

RESULT 233  
US-09-071-845-591/c  
/ Sequence 591, Application US/09071845  
/ Patent No. 6132967  
/ GENERAL INFORMATION:  
/ APPLICANT: Susan Grimm  
/ APPLICANT: Dan T. Stinchcomb  
/ APPLICANT: James McSwiggen  
/ APPLICANT: Sean Sullivan  
/ APPLICANT: Kenneth G. Draper  
/ TITLE OF INVENTION: RIBOZYME TREATMENT OF  
/ TITLE OF INVENTION: DISEASES OR CONDITIONS  
/ TITLE OF INVENTION: RELATED TO LEVELS OF  
/ TITLE OF INVENTION: INTRACELLULAR ADHESION  
/ TITLE OF INVENTION: MOLECULE-1 (I-CAM-1)  
/ NUMBER OF SEQUENCES: 2390  
/ CORRESPONDENCE ADDRESS:  
/ ADDRESSEE: Lyon & Lyon  
/ STREET: 633 West Fifth Street  
/ STREET: Suite 4700

/ CITY: Los Angeles  
/ STATE: California  
/ COUNTRY: U.S.A.  
/ ZIP: 90071-2066  
/ COMPUTER READABLE FORM:  
/ MEDIUM TYPE: 3.5" Diskette, 1.44 Mb  
/ MEDIUM TYPE: storage  
/ COMPUTER: IBM Compatible  
/ OPERATING SYSTEM: IBM P.C. DOS 5.0  
/ SOFTWARE: Word Perfect 5.1  
/ CURRENT APPLICATION DATA:  
/ APPLICATION NUMBER: US/09/071,845  
/ FILING DATE:  
/ CLASSIFICATION:  
/ PRIOR APPLICATION DATA:  
/ APPLICATION NUMBER: US/08/292,620  
/ FILING DATE: August 17, 1994  
/ APPLICATION NUMBER: 08/008,895  
/ FILING DATE: January 19, 1993  
/ APPLICATION NUMBER: 07/989,849  
/ FILING DATE: December 7, 1992  
/ ATTORNEY/AGENT INFORMATION:  
/ NAME: Warburg, Richard J.  
/ REGISTRATION NUMBER: 32,327  
/ REFERENCE/DOCKET NUMBER: 208/149  
/ TELECOMMUNICATION INFORMATION:  
/ TELEPHONE: (213) 489-1600  
/ TELEFAX: (213) 955-0440  
/ TELEX: 67-3510  
/ INFORMATION FOR SEQ ID NO: 591:  
/ SEQUENCE CHARACTERISTICS:  
/ LENGTH: 15 base pairs  
/ TYPE: nucleic acid  
/ STRANDEDNESS: single  
/ TOPOLOGY: linear  
/ US-09-071-845-591

Query Match 2.7%; Score 12; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 19 CTGGGAGGGGTG 30  
|||||  
Db 12 CTGGGAGGGGTG 1

RESULT 234  
US-09-081-646-720/c  
/ Sequence 720, Application US/09081646  
/ Patent No. 6333152  
/ GENERAL INFORMATION:  
/ APPLICANT: Kinzler, Kenneth  
/ APPLICANT: Vogelstein, Bert  
/ APPLICANT: Zhang, Lin  
/ APPLICANT: Zhou, Wei  
/ TITLE OF INVENTION: Gene Expression Profiles in No. 6333152mal and  
/ FILE REFERENCE: Cancer Cells  
/ FILE REFERENCE: 01107.74664  
/ CURRENT APPLICATION NUMBER: US/09/081,646  
/ CURRENT FILING DATE: 1998-05-20  
/ EARLIER APPLICATION NUMBER: 60/047,352  
/ EARLIER FILING DATE: 1997-05-21  
/ NUMBER OF SEQ ID NOS: 871  
/ SEQ ID NO 720  
/ SOFTWARE: FastSeq for Windows Version 3.0  
/ LENGTH: 15  
/ TYPE: DNA  
/ ORGANISM: Homo sapiens  
/ US-09-081-646-720

Query Match 2.7%; Score 12; DB 1; Length 15;  
Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 439 GGCTCACACATG 450  
Db 12 GGCTCACACATG 1

## RESULT 235

US-08-050-073-112/c  
; Sequence 112, Application US/08050073  
; Patent No. 5567809  
; GENERAL INFORMATION:  
; APPLICANT: Apple, Raymond J.  
; APPLICANT: Begovich, Ann B.  
; APPLICANT: Bugawan, Teodorica L.  
; APPLICANT: Erlich, Henry A.  
; APPLICANT: Griffith, Robert L.  
; APPLICANT: Scharf, Stephen J.  
; TITLE OF INVENTION: Methods and Reagents for HLA DRbeta DNA  
; TITLE OF INVENTION: Typing  
; NUMBER OF SEQUENCES: 315  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Hoffmann-La Roche Inc.  
; STREET: 340 Kingsland Street  
; CITY: Nutley  
; STATE: New Jersey  
; COUNTRY: U.S.A.  
; ZIP: 07110  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/050,073  
; FILING DATE:  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Petry, Douglas A.  
; REGISTRATION NUMBER: 35,321  
; REFERENCE/DOCKET NUMBER: 8769  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (510) 814-2974  
; TELEFAX: (510) 814-2977  
; INFORMATION FOR SEQ ID NO: 112:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 16 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: genomic DNA  
US-08-050-073-112

Query Match 2.7%; Score 12; DB 1; Length 16;  
Best Local Similarity 100.0%; Pred. No. 2.4e+02;  
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 430 CCAGGACTCGGC 441  
Db 16 CCAGGACTCGGC 5

## RESULT 236

US-08-679-645-515  
; Sequence 515, Application US/08679645  
; Patent No. 6350934  
; GENERAL INFORMATION:  
; APPLICANT: Zwick, Michael G.  
; APPLICANT: Edington, Brent E.  
; APPLICANT: McSwiggen, James A.  
; APPLICANT: Merlo, Patricia Ann Owens  
; APPLICANT: Guo, Lining  
; APPLICANT: Skokut, Thomas A.  
; APPLICANT: Young, Scott A.

; APPLICANT: Folkerts, Otto  
; APPLICANT: Merlo, Donald J.  
; TITLE OF INVENTION: COMPOSITION AND METHODS FOR  
; TITLE OF INVENTION: MODULATION OF GENE EXPRESSION  
; NUMBER OF SEQUENCES: 1263  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Lyon & Lyon  
; STREET: 633 West Fifth Street  
; CITY: Los Angeles  
; STATE: California  
; COUNTRY: U.S.A.  
; ZIP: 90071-2066  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb  
; MEDIUM TYPE: storage  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: IBM P.C. DOS 5.0  
; SOFTWARE: Word Perfect 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/679,645  
; FILING DATE: July 12, 1996  
; CLASSIFICATION: 800  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 60/001,135  
; FILING DATE: July 13, 1995  
; APPLICATION NUMBER: 08/300,726  
; FILING DATE: September 2, 1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Warburg, Richard J.  
; REGISTRATION NUMBER: 32,327  
; REFERENCE/DOCKET NUMBER: 219/247  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (213) 489-1600  
; TELEFAX: (213) 955-0440  
; TELEX: 67-3510  
; INFORMATION FOR SEQ ID NO: 515:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 16 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-08-679-645-515

Query Match 2.7%; Score 12; DB 1; Length 16;  
Best Local Similarity 91.7%; Pred. No. 2.4e+02;  
Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 134 CGGCTGCGGCC 145  
Db 4 CGGCTGCGGCC 15

## RESULT 237

US-08-310-501-4/c  
; Sequence 4, Application US/08310501  
; Patent No. 5567687  
; GENERAL INFORMATION:  
; APPLICANT: Magda, Darren  
; APPLICANT: Sessler, Jonathan L.  
; APPLICANT: Iverson, Brent  
; APPLICANT: Jansen, Petra I.  
; APPLICANT: Wright, Meredith  
; APPLICANT: Mody, Tarak D.  
; APPLICANT: Hemmi, Gregory W.  
; TITLE OF INVENTION: Texpaphyrins and Uses Thereof  
; NUMBER OF SEQUENCES: 6  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Arnold, White & Durkee  
; STREET: P.O. Box 4433  
; CITY: Houston  
; STATE: Texas

COUNTRY: US  
ZIP: 77210  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/310,501  
FILING DATE: Concurrently herewith  
CLASSIFICATION: 514  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/112,872  
FILING DATE: 25-AUG-1993  
APPLICATION NUMBER: PCT/US94/06284  
FILING DATE: 09-JUN-1994  
APPLICATION NUMBER: US 07/822,964  
FILING DATE: 21-JAN-1992  
APPLICATION NUMBER: US 08/227,370  
FILING DATE: 14-APR-1994  
APPLICATION NUMBER: US 08/075,123  
FILING DATE: 09-JUN-1993  
APPLICATION NUMBER: US 07/822,964  
FILING DATE: 21-JAN-1992  
APPLICATION NUMBER: US 07/771,393  
FILING DATE: 30-SEP-1991  
APPLICATION NUMBER: US 07/539,975  
FILING DATE: 18-JUN-1990  
APPLICATION NUMBER: PCT/US90/01208  
FILING DATE: 06-MAR-1990  
APPLICATION NUMBER: US 07/320,293  
FILING DATE: 06-MAR-1989  
ATTORNEY/AGENT INFORMATION:  
NAME: Parker, David L.  
REGISTRATION NUMBER: 32,165  
REFERENCE/DOCKET NUMBER: PHAY.034/PAR  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 512/418-3000  
TELEFAX: 512/474-7577  
TELEX: n/a  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: RNA (genomic)  
US-08-310-501-4

Query Match 2.6%; Score 11.8; DB 1; Length 15;  
Best Local Similarity 86.7%; Pred. No. 2.3e+02;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 436 CTCGGCTCACATG 450  
Db 15 CCCGGCTCACATG 1

RESULT 238  
US-08-469-177-4/c  
Sequence 4, Application US/08469177  
Patent No. 5607924  
GENERAL INFORMATION:  
APPLICANT: MAGDA, Darren  
APPLICANT: SESSLER, Jonathan L.  
APPLICANT: IVERSON, Brent L.  
APPLICANT: SANSOM, Petra I.  
APPLICANT: WRIGHT, Meredith  
TITLE OF INVENTION: DNA PHOTOCLEAVAGE USING TEXAPHYRINS  
NUMBER OF SEQUENCES: 10  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pharmacyclics, Inc.  
STREET: 995 East Arques Avenue

CITY: Sunnyvale  
STATE: California  
COUNTRY: United States of America  
ZIP: 94086  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/469,177  
FILING DATE: 06-JUN-1995  
CLASSIFICATION: 514  
ATTORNEY/AGENT INFORMATION:  
NAME: Larson, Jacqueline S.  
REGISTRATION NUMBER: 30,279  
REFERENCE/DOCKET NUMBER: PHAY.057  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (408) 774-3363  
TELEFAX: (408) 774-0340  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid  
DESCRIPTION: /desc = "RNA"  
US-08-469-177-4

Query Match 2.6%; Score 11.8; DB 1; Length 15;  
Best Local Similarity 86.7%; Pred. No. 2.3e+02;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 436 CTCGGCTCACATG 450  
Db 15 CCCGGCTCACATG 1

RESULT 239  
US-08-484-551-1/c  
Sequence 1, Application US/08484551  
Patent No. 5714328  
GENERAL INFORMATION:  
APPLICANT: Magda, Darren  
APPLICANT: Sessler, Jonathan L.  
TITLE OF INVENTION: RNA PHOTOCLEAVAGE USING TEXAPHYRINS  
NUMBER OF SEQUENCES: 8  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Arnold, White & Durkee  
STREET: P.O. Box 4433  
CITY: Houston  
STATE: Texas  
COUNTRY: United States of America  
ZIP: 77210  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/484,551  
FILING DATE: Concurrently herewith  
CLASSIFICATION: 514  
ATTORNEY/AGENT INFORMATION:  
NAME: Parker, David L.  
REGISTRATION NUMBER: 32,165  
REFERENCE/DOCKET NUMBER: PHAY.047/PAR  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (512) 418-3000  
TELEFAX: (512) 747-7577  
TELEX: 79-0924  
INFORMATION FOR SEQ ID NO: 1:

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; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "DNA"
US-08-484-551-1

Query Match          2.6%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 2.3e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 436 CTCGGCTCACACATG 450
Db 15 CCCGGCTCACACATG 1

RESULT 240
US-08-484-551-5/c
; Sequence 5, Application US/08484551
; Patent No. 5714328
; GENERAL INFORMATION:
; APPLICANT: Magda, Darren
; APPLICANT: Sessler, Jonathan L.
; TITLE OF INVENTION: RNA PHOTOCLEAVAGE USING TEXAPHYRINS
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Arnold, White & Durkee
; STREET: P.O. Box 4433
; CITY: Houston
; STATE: Texas
; COUNTRY: United States of America
; ZIP: 77210
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/484 551
; FILING DATE: Concurrently herewith
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Parker, David L.
; REGISTRATION NUMBER: 32,165
; REFERENCE/DOCKET NUMBER: PHAY:047/PAR
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (512) 418-3000
; TELEFAX: (512) 747-7577
; TELEX: 79-0924
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "RNA"
US-08-484-551-5

Query Match          2.6%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 2.3e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 436 CTCGGCTCACACATG 450
Db 15 CCCGGCTCACACATG 1

RESULT 241
US-08-486-962-18/c
; Sequence 18, Application US/08486962
```

```
; Patent No. 5763172
; GENERAL INFORMATION:
; APPLICANT: Magda, Darren
; APPLICANT: Sessler, Jonathan L.
; APPLICANT: Wright, Meredith
; APPLICANT: Ross, Kevin L.
; APPLICANT: Miller, Richard A.
; APPLICANT: Dow, William C.
; APPLICANT: Kral, Vladimir A.
; APPLICANT: Smith, Daniel A.
; TITLE OF INVENTION: METHOD OF PHOSPHATE ESTER HYDROLYSIS
; NUMBER OF SEQUENCES: 18
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Pharmacyclics, Inc.
; STREET: 995 E. Arques Avenue
; CITY: Sunnyvale
; STATE: California
; COUNTRY: USA
; ZIP: 94086-4521
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/486,962
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Larson, Jacqueline S.
; REGISTRATION NUMBER: 30,279
; REFERENCE/DOCKET NUMBER: PHAY:053
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (408) 774-0330
; TELEFAX: (408) 774-0340
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid
; DESCRIPTION: /desc = "DNA"
US-08-486-962-18

Query Match          2.6%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 2.3e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 436 CTCGGCTCACACATG 450
Db 15 CCCGGCTCACACATG 1

RESULT 242
US-08-323-192D-11
; Sequence 11, Application US/08323192D
; Patent No. 5786199
; GENERAL INFORMATION:
; APPLICANT: Palese, Peter
; TITLE OF INVENTION: RECOMBINANT NEGATIVE STRAND RNA VIRUS
; NUMBER OF SEQUENCES: 70
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Pennie & Edmonds
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036-2711
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
```

OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/323,192D  
FILING DATE: 14-OCT-1994  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Coruzzi, Laura A.  
REGISTRATION NUMBER: 30,742  
REFERENCE/DOCKET NUMBER: 7682-035  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-9741/8864  
TELEX: 66141 PENNIE  
INFORMATION FOR SEQ ID NO: 11:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: unknown  
TOPOLOGY: unknown  
MOLECULE TYPE: RNA  
US-08-323-192D-11

Query Match 2.6%; Score 11.8; DB 1; Length 15;  
Best Local Similarity 46.7%; Pred. No. 2.3e+02;  
Matches 7; Conservative 6; Mismatches 2; Indels 0; Gaps 0;  
QY 72 CCGCGTGTCTTGCT 86  
DB 1 CACCCGCUUUUCU 15

RESULT 243  
US-08-294-424-35/c  
Sequence 35, Application US/08294424  
Patent No. 5800984  
GENERAL INFORMATION:  
APPLICANT: Vary, Calvin  
TITLE OF INVENTION: NUCLEIC ACID SEQUENCE DETECTION BY  
TITLE OF INVENTION: TRIPLE HELIX FORMATION  
NUMBER OF SEQUENCES: 49  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: Massachusetts  
COUNTRY: U.S.A.  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage  
COMPUTER: IBM PS/2 Model 50Z or 55SX  
OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)  
SOFTWARE: WordPerfect (Version 5.0)  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/294,424  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/08/000,922  
FILING DATE: 16 JAN 1993  
APPLICATION NUMBER: US/07/629,601B  
FILING DATE: 17-DEC-1990  
ATTORNEY/AGENT INFORMATION:  
NAME: Freeman, John W.  
REGISTRATION NUMBER: 29,066  
REFERENCE/DOCKET NUMBER: 00088-037001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (617) 542-5070  
TELEFAX: (617) 542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 35 :  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15

TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-294-424-35  
Query Match 2.6%; Score 11.8; DB 1; Length 15;  
Best Local Similarity 86.7%; Pred. No. 2.3e+02;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 373 GAGGAACGGAGCGAG 387  
DB 15 GAGGAAGGAGGAG 1  
RESULT 244  
US-08-311-486C-218  
Sequence 218, Application US/08311486C  
Patent No. 5811300  
GENERAL INFORMATION:  
APPLICANT: Sean Sullivan  
APPLICANT: Kenneth Draper  
APPLICANT: Kevin Kisich  
APPLICANT: Dan T. Stinchcomb  
TITLE OF INVENTION: RIBOZYME TREATMENT OF  
DISEASES OR CONDITIONS  
TITLE OF INVENTION: RELATED TO LEVELS OF  
TITLE OF INVENTION: TNF-  
NUMBER OF SEQUENCES: 1157  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Lyon & Lyon  
STREET: 633 West Fifth Street  
STREET: Suite 4700  
CITY: Los Angeles  
STATE: California  
COUNTRY: U.S.A.  
ZIP: 90071-2066  
COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: IBM P.C. DOS 5.0  
SOFTWARE: Word Perfect 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/311,486C  
FILING DATE: September 23, 1994  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
PRIOR APPLICATION DATA: including application  
PRIOR APPLICATION DATA: described below:  
APPLICATION NUMBER: 08/008,895  
FILING DATE: January 19, 1993  
APPLICATION NUMBER: 07/989,849  
FILING DATE: December 7, 1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Warburg, Richard J.  
REGISTRATION NUMBER: 32,327  
REFERENCE/DOCKET NUMBER: 209/166  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (213) 489-1600  
TELEFAX: (213) 955-0440  
TELEX: 67-3510  
INFORMATION FOR SEQ ID NO: 218:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-311-486C-218

Query Match 2.6%; Score 11.8; DB 1; Length 15;  
Best Local Similarity 66.7%; Pred. No. 2.3e+02;  
Matches 10; Conservative 3; Mismatches 2; Indels 0; Gaps 0;



Qy 436 CTCGGCTCACATG 450  
|: |||: |||: |||:  
Db 1 CUUGGCUACAG 15

## RESULT 245

US-08-470-887A-10  
; Sequence 10, Application US/08470887A  
; Patent No. 5820871  
; GENERAL INFORMATION:  
; APPLICANT: Palese, Peter  
; APPLICANT: Garcia-Sastre, Adolfo  
; TITLE OF INVENTION: RECOMBINANT NEGATIVE STRAND RNA VIRUS  
; TITLE OF INVENTION: EXPRESSION SYSTEMS AND VACCINES  
; NUMBER OF SEQUENCES: 60  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Pennie & Edmonds  
; STREET: 1155 Avenue of the Americas  
; CITY: New York  
; STATE: New York  
; COUNTRY: USA  
; ZIP: 10036-2711  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/470,887A  
; FILING DATE: 06-JUN-1995  
; CLASSIFICATION:  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Coruzzi, Laura A.  
; REGISTRATION NUMBER: 30,742  
; REFERENCE/DOCKET NUMBER: 7682-036  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (212) 790-9090  
; TELEFAX: (212) 869-9741/8864  
; TELEX: 66141 PENNIE  
; INFORMATION FOR SEQ ID NO: 10:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: unknown  
; MOLECULE TYPE: RNA (genomic)  
US-08-470-887A-10

Query Match 2.6%; Score 11.8; DB 1; Length 15;  
Best Local Similarity 46.7%; Pred. No. 2.3e+02;  
Matches 7; Conservative 6; Mismatches 2; Indels 0; Gaps 0;

Qy 72 CGCCGTCCTTTGCT 86  
| |||: |||: |||:  
Db 1 CACCCUGCUUUGCU 15

## RESULT 246

US-08-232-620A-292/C  
; Sequence 292, Application US/08292620A  
; Patent No. 5837542  
; GENERAL INFORMATION:  
; APPLICANT: Susan Grimm  
; APPLICANT: Dan T. Stinchcomb  
; APPLICANT: James McSwiggen  
; APPLICANT: Sean Sullivan  
; APPLICANT: Kenneth G. Draper  
; TITLE OF INVENTION: RIBOZYME TREATMENT OF  
; TITLE OF INVENTION: DISEASES OR CONDITIONS  
; TITLE OF INVENTION: RELATED TO LEVELS OF  
; TITLE OF INVENTION: INTRACELLULAR ADHESION  
; TITLE OF INVENTION: MOLECULE-1 (I-CAM-1)

; NUMBER OF SEQUENCES: 2390  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Lyon & Lyon  
; STREET: 633 West Fifth Street  
; STREET: Suite 4700  
; CITY: Los Angeles  
; STATE: California  
; COUNTRY: U.S.A.  
; ZIP: 90071-2066  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb  
; MEDIUM TYPE: storage  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: IBM P.C. DOS 5.0  
; SOFTWARE: Word Perfect 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/292,620A  
; FILING DATE: August 17, 1994  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; PRIOR APPLICATION DATA: including application  
; PRIOR APPLICATION DATA: described below:  
; APPLICATION NUMBER: 08/008,895  
; FILING DATE: January 19, 1993  
; APPLICATION NUMBER: 07/989,849  
; FILING DATE: December 7, 1992  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Warburg, Richard J.  
; REGISTRATION NUMBER: 32,327  
; REFERENCE/DOCKET NUMBER: 208/149  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (213) 489-1600  
; TELEFAX: (213) 955-0440  
; TELEX: 67-3510  
; INFORMATION FOR SEQ ID NO: 292:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-08-292-620A-292

Query Match 2.6%; Score 11.8; DB 1; Length 15;  
Best Local Similarity 86.7%; Pred. No. 2.3e+02;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 21 GCGAGGGGTGGTGGC 35  
| |||: |||: |||:  
Db 15 GCGTGGGAGGTGGC 1

## RESULT 247

US-08-316-439A-8  
; Sequence 8, Application US/08316439A  
; Patent No. 5840520  
; GENERAL INFORMATION:  
; APPLICANT: CLARKE, DAVID KIRKWOOD  
; APPLICANT: PALESE, PETER M  
; TITLE OF INVENTION: RECOMBINANT NEGATIVE STRAND RNA VIRUS EXPRESSION  
; TITLE OF INVENTION: SYSTEMS  
; NUMBER OF SEQUENCES: 43  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: COOLEY GODWARD CASTRO HUDDLESON & TATUM  
; STREET: FIVE PALO ALTO SQUARE  
; CITY: PALO ALTO  
; STATE: CALIFORNIA  
; COUNTRY: USA  
; ZIP: 94306  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25

;; CURRENT APPLICATION DATA:  
;; APPLICATION NUMBER: US/08/316,439A  
;; FILING DATE: September 30, 1994  
;; CLASSIFICATION: 424  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: 08/190,678  
;; FILING DATE: February 1, 1994  
;; CLASSIFICATION: 424  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: 07/925,061  
;; FILING DATE: August 4, 1992  
;; CLASSIFICATION: 424  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: 07/527,237  
;; FILING DATE: May 22, 1990  
;; CLASSIFICATION: 424  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: 07/440,053  
;; FILING DATE: No. 5840520ember 21, 1989  
;; CLASSIFICATION: 424  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: 07/399,728  
;; FILING DATE: August 28, 1989  
;; CLASSIFICATION: 424  
;; ATTORNEY/AGENT INFORMATION:  
;; NAME: CSERR, LUANN  
;; REGISTRATION NUMBER: 31,822  
;; REFERENCE/DOCKET NUMBER: AVIR-010/000S  
;; TELECOMMUNICATION INFORMATION:  
;; TELEPHONE: (415) 843-5165  
;; TELEFAX: (415) 857-0663  
;; TELEX: 380816 COOLEY PA  
;; INFORMATION FOR SEQ ID NO: 8:  
;; SEQUENCE CHARACTERISTICS:  
;; LENGTH: 15 bases  
;; TYPE: nucleic acid  
;; STRANDEDNESS: single  
;; TOPOLOGY: linear  
;; MOLECULE TYPE: SYNTHETIC DNA  
US-08-316-439A-8

Query Match 2.6%; Score 11.8; DB 1; Length 15;  
Best Local Similarity 46.7%; Pred. No. 2.3e+02;  
Matches 7; Conservative 6; Mismatches 2; Indels 0; Gaps 0;

QY 72 CGCCGTCGTTTGTCT 86  
|||:||||:|  
Db 1 CACCCUGCUUUGCU 15

RESULT 248  
US-08-252-508B-10  
; Sequence 10, Application US/08252508B  
; Patent No. 5854037  
; GENERAL INFORMATION:  
; APPLICANT: Palese, Peter  
; APPLICANT: Garcia-Sastre, Adolfo  
; TITLE OF INVENTION: RECOMBINANT NEGATIVE STRAND RNA VIRUS  
; TITLE OF INVENTION: EXPRESSION SYSTEMS AND VACCINES  
; NUMBER OF SEQUENCES: 60  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Pennie & Edmonds  
; STREET: 1155 Avenue of the Americas  
; CITY: New York  
; STATE: New York  
; COUNTRY: USA  
; ZIP: 10036-2711  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:

;; APPLICATION NUMBER: US/08/252,508B  
;; FILING DATE: 01-JUN-1994  
;; CLASSIFICATION:  
;; ATTORNEY/AGENT INFORMATION:  
;; NAME: Coruzzi, Laura A.  
;; REGISTRATION NUMBER: 30,742  
;; REFERENCE/DOCKET NUMBER: 7682-034  
;; TELECOMMUNICATION INFORMATION:  
;; TELEPHONE: (212) 790-9090  
;; TELEFAX: (212) 869-9741/8864  
;; TELEX: 66141 PENNIE  
;; INFORMATION FOR SEQ ID NO: 10:  
;; SEQUENCE CHARACTERISTICS:  
;; LENGTH: 15 base pairs  
;; TYPE: nucleic acid  
;; STRANDEDNESS: single  
;; TOPOLOGY: unknown  
;; MOLECULE TYPE: RNA (genomic)  
US-08-252-508B-10

Query Match 2.6%; Score 11.8; DB 1; Length 15;  
Best Local Similarity 46.7%; Pred. No. 2.3e+02;  
Matches 7; Conservative 6; Mismatches 2; Indels 0; Gaps 0;

QY 72 CGCCGTCGTTTGTCT 86  
|||:||||:|  
Db 1 CACCCUGCUUUGCU 15

RESULT 249  
US-08-173-489C-141/c  
; Sequence 141, Application US/08173489C  
; Patent No. 5861244  
; GENERAL INFORMATION:  
; APPLICANT: WANG, C. -G.  
; APPLICANT: HEPBURN, A. G.  
; TITLE OF INVENTION: GENETIC SEQUENCE ASSAY USING DNA  
; TITLE OF INVENTION: TRIPLE-STRAND FORMATION.  
; NUMBER OF SEQUENCES: 365  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: PROFILE DIAGNOSTIC SCIENCES, INC.,  
; STREET: 510 EAST 73RD STREET,  
; CITY: NEW YORK  
; STATE: NEW YORK  
; COUNTRY: USA  
; ZIP: 10021.  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: 3.5 inch, 1.44Mb storage  
; COMPUTER: IBM PC/XT/AT  
; OPERATING SYSTEM: MS-DOS version 6.2  
; SOFTWARE: Wordperfect Version 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/173,489C  
; FILING DATE: 22 DEC 1993  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/968,436  
; FILING DATE: 29 OCT 1992  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Handelman, Joseph H.  
; REGISTRATION NUMBER: 26,179  
; REFERENCE/DOCKET NUMBER: U9518-6  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (attorney) (212) 708-1880  
; TELEFAX: (attorney) (212) 246-8959  
; INFORMATION FOR SEQ ID NO: 141:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 15 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: double stranded  
; TOPOLOGY: linear  
; MOLECULE TYPE: genomic DNA  
; DESCRIPTION: hepatitis B virus adr isolate,

DESCRIPTION: nucleotides 2405 to 2419  
HYPOTHETICAL: no  
ANTI-SENSE: no  
ORIGINAL SOURCE:  
ORGANISM: Hepatitis B virus  
INDIVIDUAL ISOLATE: adr  
PUBLICATION INFORMATION:  
AUTHORS: Fujiyama, A, Miyanchara, A, No. 5861244aki, C,  
Yoneyama, T, Ohromo, N, Matsubara, K.  
TITLE: Cloning and structural  
analysis of Hepatitis B virus DNAs subtype adr  
JOURNAL: Nucleic Acids Research  
VOLUME: 11  
PAGES: 4601-4610  
DATE: 1983  
RELEVANT RESIDUES IN SEQ ID NO: 141 :FROM 1 TO 15  
US-08-173-489C-141

Query Match 2.6%; Score 11.8; DB 1; Length 15;  
Best Local Similarity 86.7%; Pred. No. 2.3e+02;  
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 373 GAGGAACGGAGCGAG 387  
Db 15 GAGGAAGGAGCGAG 1

RESULT 250  
US-08-550-120-3  
Sequence 3, Application US/08550120  
Patent No. 5985554  
GENERAL INFORMATION:  
APPLICANT: Hiroshi TANIMURA et al.  
TITLE OF INVENTION: METHOD FOR PROBING THE FUNCTION OF A PROTEIN  
NUMBER OF SEQUENCES: 14  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Wenderoth, Lind & Ponack  
STREET: 805 Fifteenth Street, N.W., #700  
CITY: Washington  
STATE: D.C.  
COUNTRY: U.S.A.  
ZIP: 20005  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette, 3.5 inch, 1.44 mb  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: MS-DOS  
SOFTWARE: Wordperfect 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/550,120  
FILING DATE: October 30, 1995  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: JP 6-269417  
FILING DATE: No. 598554ember 2, 1994  
ATTORNEY/AGENT INFORMATION:  
NAME: Warren M. Cheek, Jr.  
REGISTRATION NUMBER: 33,367  
REFERENCE/DOCKET NUMBER:  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 202-371-8850  
TELEFAX:  
TELEX:  
INFORMATION FOR SEQ ID NO: 3:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 bases  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: other nucleic acid, synthetic DNA  
US-08-550-120-3

Query Match 2.6%; Score 11.8; DB 1; Length 15;  
Best Local Similarity 86.7%; Pred. No. 2.3e+02;

Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 389 CCGCGCGCGCGCGC 403  
Db 1 CCGCGCGCGCGCGC 15

RESULT 251  
US-09-106-377-10  
Sequence 10, Application US/09106377  
Patent No. 6001634  
GENERAL INFORMATION:  
APPLICANT: Palese, Peter  
APPLICANT: Garcia-Sastre, Adolfo  
TITLE OF INVENTION: RECOMBINANT NEGATIVE STRAND RNA VIRUS  
EXPRESSION SYSTEMS AND VACCINES  
NUMBER OF SEQUENCES: 60  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: USA  
ZIP: 10036-2711  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/106,377  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/252,508  
FILING DATE: 01-JUN-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: Coruzzi, Laura A.  
REGISTRATION NUMBER: 30,742  
REFERENCE/DOCKET NUMBER: 7682-034  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-9741/8864  
TELEX: 66141 PENNIE  
INFORMATION FOR SEQ ID NO: 10:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 15 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: unknown  
MOLECULE TYPE: RNA (genomic)  
US-09-106-377-10

Query Match 2.6%; Score 11.8; DB 1; Length 15;  
Best Local Similarity 46.7%; Pred. No. 2.3e+02;  
Matches 7; Conservative 6; Mismatches 2; Indels 0; Gaps 0;

Qy 72 CGCGCGTCTTTGCT 86  
Db 1 CACCCUGCUUUGCU 15

RESULT 252  
US-09-071-845-292/c  
Sequence 292, Application US/09071845  
Patent No. 6132967  
GENERAL INFORMATION:  
APPLICANT: Susan Grimm  
APPLICANT: Dan T. Stinchcomb  
APPLICANT: James McSwiggen  
APPLICANT: Sean Sullivan  
APPLICANT: Kenneth G. Draper  
TITLE OF INVENTION: RIBOZYME TREATMENT OF

```

; TITLE OF INVENTION: DISEASES OR CONDITIONS
; TITLE OF INVENTION: RELATED TO LEVELS OF
; TITLE OF INVENTION: INTRACELLULAR ADHESION
; TITLE OF INVENTION: MOLECULE-1 (I-CAM-1)
; NUMBER OF SEQUENCES: 2390
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; CITY: Suite 4700
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; MEDIUM TYPE: storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; APPLICATION NUMBER: US/09/071.845
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/292.620
; FILING DATE: August 17, 1994
; APPLICATION NUMBER: 08/008,895
; FILING DATE: January 19, 1993
; APPLICATION NUMBER: 07/989,849
; FILING DATE: December 7, 1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 208/149
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
;
; INFORMATION FOR SEQ ID NO: 292:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
;
; US-09-071-845-292
;
; Query Match 2.6%; Score 11.8; DB 1; Length 15;
; Best Local Similarity 86.7%; Pred. No. 2.3e+02;
; Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
;
Qy 21 GCGAGGGGTGGTGGC 35
Db 15 GCGTGGGGAGGTGGC 1
;
RESULT 253
US-08-871-732A-9
; Sequence 9, Application US/08871732A
; Patent No. 6140074
; GENERAL INFORMATION:
; APPLICANT: O'BRIEN, TIMOTHY J.
; APPLICANT: WANG, YIN
; TITLE OF INVENTION: NOVEL SH3 PROTEIN, GENE, CHIMERIC
; TITLE OF INVENTION: CELLS, VECTORS AND EXPRESSION METHOD FOR PRODUCING THE NOVEL
; TITLE OF INVENTION: PROTEIN, ANTIBODIES AND USES
; NUMBER OF SEQUENCES: 16
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MARTIN L. MCGREGOR
; STREET: 5380 WEST 34TH STREET, #345
; CITY: HOUSTON
; STATE: TEXAS
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 77092

```

```

; COMPUTER READABLE FORM:
; MEDIUM TYPE: DISKETTE 3.5 INCH 1.44 MB STORAGE
; COMPUTER: IBM COMPATIBLE
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: WORDPERFECT 6.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/871,732A
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; ATTORNEY/AGENT INFORMATION:
; NAME: MCGREGOR, MARTIN L.
; REGISTRATION NUMBER: 29,329
; REFERENCE/DOCKET NUMBER: 1-1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 713-682-1213
; TELEFAX: 713-682-5807
; TELEX: NONE
; INFORMATION FOR SEQ ID NO: 9:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 BASE PAIRS
; TYPE: NUCLEIC ACID
; STRANDEDNESS: SINGLE
; TOPOLOGY: LINEAR
; MOLECULE TYPE: OTHER NUCLEIC ACID
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
;
; US-08-871-732A-9
;
; Query Match 2.6%; Score 11.8; DB 1; Length 15;
; Best Local Similarity 86.7%; Pred. No. 2.3e+02;
; Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
;
Qy 21 GCGAGGGGTGGTGGC 35
Db 1 GCGTGGGGGTGGC 15
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RESULT 254
US-09-180-437-212/c
; Sequence 212, Application US/09180437
; Patent No. 6251873
; GENERAL INFORMATION:
; APPLICANT: FUKUSAKO, Shioji
; APPLICANT: MORISAWA, Yoshifumi
; APPLICANT: KUSUVAMA, Takeshi
; TITLE OF INVENTION: Antisense Compounds to CD14
; FILE REFERENCE: 1110-209P
; CURRENT APPLICATION NUMBER: US/09/180,437
; CURRENT FILING DATE: 1998-11-06
; EARLIER APPLICATION NUMBER: PCT/JP98/00953
; EARLIER FILING DATE: 1998-03-09
; EARLIER APPLICATION NUMBER: 09-053518 JAPAN
; EARLIER FILING DATE: 1997-03-07
; NUMBER OF SEQ ID NOS: 289
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 212
; LENGTH: 15
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: other nucleic
; OTHER INFORMATION: acid
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; US-09-180-437-212
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; Query Match 2.6%; Score 11.8; DB 1; Length 15;
; Best Local Similarity 86.7%; Pred. No. 2.3e+02;
; Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
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Qy 264 GCCCGGGGCTTCTCC 278
Db 15 GCCCGGGGCTTGGC 1

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RESULT 255
US-09-346-510B-9
; Sequence 9, Application US/09346510B
; Patent No. 6281014
; GENERAL INFORMATION:
; APPLICANT: O'Brien, Timothy J.
; APPLICANT: Wang, Yinxiang
; TITLE OF INVENTION: SH3-Containing Protein, DNA and Uses Thereof
; FILE REFERENCE: D6221CIP
; CURRENT APPLICATION NUMBER: US/09/346.510B
; CURRENT FILING DATE: 1999-07-01
; PRIOR APPLICATION NUMBER: 08/871,732
; PRIOR FILING DATE: 1997-06-09
; NUMBER OF SEQ ID NOS: 32
; SEQ ID NO 9
; LENGTH: 15
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: nucleotide sequence of clone 17 isolated using the
; OTHER INFORMATION: CASTING approach
US-09-346-510B-9

Query Match      2.6%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 2.3e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      21 GGGAGGGGTGGTGGC 35
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Db      1 GGGTGGGGGGGTGGC 15

RESULT 256
US-09-544-934B-106
; Sequence 106, Application US/09544934B
; Patent No. 6753421
; GENERAL INFORMATION:
; APPLICANT: Henrik Stender
; APPLICANT: Kaare Lund
; APPLICANT: Tina Anderson Hollerup
; TITLE OF INVENTION: No. 6753421el Process For The Detection of Mycobacteria
; NUMBER OF SEQUENCES: 123
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FINNEGAN, HENDERSON, FARABOW, GARRETT, & DUNNER
; STREET: 1300 I ST. NW
; CITY: Washington
; STATE: District of Columbia
; COUNTRY: USA
; ZIP: 20005
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk 3.5 inch
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: ASCXI
; SOFTWARE: Microsoft Word
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/544,934B
; FILING DATE: 07-Apr-2000
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/028,392
; FILING DATE: 15-Oct-96
; APPLICATION NUMBER: 60/029,595
; FILING DATE: 23-Oct-96
; APPLICATION NUMBER: 60/045,962
; FILING DATE: 08-May-97
; APPLICATION NUMBER: 08/943,777
; FILING DATE: 3-Oct-97
; ATTORNEY/AGENT INFORMATION:
; NAME: Anthony C. Tridico
; REGISTRATION NUMBER: 45,958
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4173
; TELEFAX: (202) 408-4400
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; INFORMATION FOR SEQ ID NO: 106:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 basepairs
; TYPE: nucleic acid basepairs
; STRANDEDNESS: single
; TOPOLOGY: linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 106:
US-09-544-934B-106

Query Match      2.6%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 2.3e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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Db      1 CGGCTGCTGGCACGT 15

RESULT 257
5166057-23
; Patent No. 5166057
; APPLICANT: PALSESE, PETER; PARVIN, JEFFREY D.; KRYSSTAL, MARK
; TITLE OF INVENTION: RECOMBIANT NEGATIVE STRAND RNA VIRUS
; EXPRESSION-SYSTEMS
; NUMBER OF SEQUENCES: 43
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/527,237
; FILING DATE: 22-MAY-1990
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 440,053
; FILING DATE: 21-NOV-1989
; APPLICATION NUMBER: 399,728
; FILING DATE: 28-AUG-1989
; SEQ ID NO:23
; LENGTH: 15
5166057-23

Query Match      2.6%; Score 11.8; DB 1; Length 15;
Best Local Similarity 46.7%; Pred. No. 2.3e+02;
Matches 7; Conservative 6; Mismatches 2; Indels 0; Gaps 0;

Qy      72 CGCCGCTGCTTTTGTCT 86
      | ||| : ||| : ||| : |||
Db      1 CACCCUGCUUUUGCU 15

Search completed: August 24, 2005, 14:29:01
Job time : 3 secs
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GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 14:36:10 ; Search time 2 Seconds  
(without alignments)  
3.348 Million cell updates/sec

Title: US-09-436-060A-16

Perfect score: 451

Sequence: 1 99gttcgaggggtggcct.....aggactcggctcacatgc 451

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 0.5

Searched: 375 seqs, 7423 residues

Total number of hits satisfying chosen parameters: 750

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 376 summaries

Database : rnnpb.subdb.\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

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1	79	17.5	79	1	US-10-714-195-84
2	31	6.9	31	1	US-10-330-872-1
3	31	6.9	31	1	US-10-811-033-1
4	30	6.7	30	1	US-09-057-351-22
5	30	6.7	30	1	US-09-003-461-2
6	30	6.7	30	1	US-10-359-935-22
7	30	6.7	30	1	US-10-330-872-4
8	30	6.7	30	1	US-10-330-872-5
9	30	6.7	30	1	US-10-811-033-4
10	30	6.7	30	1	US-10-811-033-5
11	28.4	6.3	30	1	US-10-330-872-3
12	28.4	6.3	30	1	US-10-811-033-3
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14	26	5.8	26	1	US-09-057-351-30
15	26	5.8	26	1	US-09-895-606-25
16	26	5.8	26	1	US-09-895-606-26
17	26	5.8	26	1	US-10-044-692-311
18	26	5.8	26	1	US-10-044-692-312
19	26	5.8	26	1	US-10-044-539-311
20	26	5.8	26	1	US-10-044-539-312
21	26	5.8	26	1	US-10-359-935-30
22	26	5.8	26	1	US-10-359-935-30
23	26	5.8	26	1	US-10-325-810-597
24	26	5.8	26	1	US-10-325-810-598
25	26	5.8	26	1	US-10-877-124-597
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28	26	5.8	26	1	US-10-877-022-598
29	26	5.8	26	1	US-10-877-146-597
30	26	5.8	26	1	US-10-877-146-598
31	25	5.5	28	1	US-09-057-351-29
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					Sequence 103, Appl
					Sequence 104, Appl
					Sequence 105, Appl
					Sequence 106, Appl





253	13.8	3.1	17	1	US-09-827-395A-630	Sequence 630, App	C 326	12.8	2.8	17	1	US-09-776-474-7	Sequence 7, Appli
254	13.8	3.1	17	1	US-09-740-332-800	Sequence 800, App	C 327	12.8	2.8	17	1	US-09-930-423-333	Sequence 333, App
255	13.8	3.1	17	1	US-09-740-332-3130	Sequence 3130, App	C 328	12.8	2.8	17	1	US-09-930-423-334	Sequence 334, App
256	13.8	3.1	17	1	US-09-792-818-129	Sequence 129, App	C 329	12.8	2.8	17	1	US-09-930-423-335	Sequence 335, App
257	13.8	3.1	17	1	US-09-792-818-330	Sequence 330, App	C 330	12.8	2.8	17	1	US-09-930-423-1159	Sequence 1159, App
258	13.8	3.1	17	1	US-09-745-237A-5	Sequence 5, Appli	C 331	12.8	2.8	17	1	US-09-930-423-1470	Sequence 1470, App
259	13.8	3.1	17	1	US-09-745-237A-336	Sequence 336, App	C 332	12.8	2.8	17	1	US-09-827-395A-899	Sequence 899, App
260	13.8	3.1	17	1	US-09-745-237A-1471	Sequence 1471, App	C 333	12.8	2.8	17	1	US-09-740-332-1425	Sequence 1425, App
261	13.8	3.1	17	1	US-09-745-237A-1472	Sequence 1472, App	C 334	12.8	2.8	17	1	US-09-740-332-3639	Sequence 3639, App
262	13.8	3.1	17	1	US-09-817-879-800	Sequence 800, App	C 335	12.8	2.8	17	1	US-09-740-332-3755	Sequence 3755, App
263	13.8	3.1	17	1	US-09-817-879-3130	Sequence 3130, App	C 336	12.8	2.8	17	1	US-09-792-818-331	Sequence 331, App
264	13.8	3.1	17	1	US-10-156-306-5871	Sequence 5871, App	C 337	12.8	2.8	17	1	US-09-745-237A-333	Sequence 333, App
265	13.8	3.1	17	1	US-10-156-306-5872	Sequence 5872, App	C 338	12.8	2.8	17	1	US-09-745-237A-334	Sequence 334, App
266	13.8	3.1	17	1	US-10-230-006-2217	Sequence 2217, App	C 339	12.8	2.8	17	1	US-09-745-237A-335	Sequence 335, App
267	13.8	3.1	17	1	US-10-430-882-6310	Sequence 630, App	C 340	12.8	2.8	17	1	US-09-745-237A-1159	Sequence 1159, App
268	13.8	3.1	17	1	US-10-712-672-2726	Sequence 2726, App	C 341	12.8	2.8	17	1	US-09-745-237A-1470	Sequence 1470, App
269	13.8	3.1	17	1	US-10-669-841-3393	Sequence 3393, App	C 342	12.8	2.8	17	1	US-09-817-879-1425	Sequence 1425, App
270	13.8	3.1	17	1	US-10-669-841-5723	Sequence 5723, App	C 343	12.8	2.8	17	1	US-09-817-879-3639	Sequence 3639, App
271	13.8	3.1	18	1	US-09-961-077-571	Sequence 571, App	C 344	12.8	2.8	17	1	US-09-817-879-3755	Sequence 3755, App
272	13.8	3.1	18	1	US-10-158-160A-27	Sequence 27, Appli	C 345	12.8	2.8	17	1	US-10-060-895A-738	Sequence 738, App
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275	13.4	3.0	17	1	US-09-740-332-3638	Sequence 3638, App	C 348	12.8	2.8	17	1	US-10-163-552-869	Sequence 869, App
276	13.4	3.0	17	1	US-09-792-818-429	Sequence 429, App	C 349	12.8	2.8	17	1	US-10-156-306-4930	Sequence 4930, App
277	13.4	3.0	17	1	US-09-792-818-857	Sequence 857, App	C 350	12.8	2.8	17	1	US-10-156-306-6942	Sequence 6942, App
278	13.4	3.0	17	1	US-09-817-879-317	Sequence 317, App	C 351	12.8	2.8	17	1	US-10-238-700-2700	Sequence 2700, App
279	13.4	3.0	17	1	US-09-817-879-3638	Sequence 3638, App	C 352	12.8	2.8	17	1	US-10-238-700-2821	Sequence 2821, App
280	13.4	3.0	17	1	US-10-232-634-11	Sequence 11, Appli	C 353	12.8	2.8	17	1	US-10-238-700-3508	Sequence 3508, App
281	13.4	3.0	17	1	US-10-232-634-12	Sequence 12, Appli	C 354	12.8	2.8	17	1	US-10-061-201-715	Sequence 715, App
282	13.4	3.0	17	1	US-10-157-580A-27	Sequence 27, Appli	C 355	12.8	2.8	17	1	US-10-061-201-716	Sequence 716, App
283	13.4	3.0	17	1	US-10-157-580A-38	Sequence 38, Appli	C 356	12.8	2.8	17	1	US-10-230-006-1249	Sequence 1249, App
284	13.4	3.0	17	1	US-10-157-580A-68	Sequence 68, Appli	C 357	12.8	2.8	17	1	US-10-230-006-1284	Sequence 1284, App
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286	13.4	3.0	17	1	US-10-138-674-7501	Sequence 7501, App	C 359	12.8	2.8	17	1	US-10-297-068-1071	Sequence 1071, App
287	13.4	3.0	17	1	US-10-287-949A-4559	Sequence 4559, App	C 360	12.8	2.8	17	1	US-10-307-005-751	Sequence 751, App
288	13.4	3.0	17	1	US-10-287-949A-7501	Sequence 7501, App	C 361	12.8	2.8	17	1	US-10-307-005-752	Sequence 752, App
289	13.4	3.0	17	1	US-10-669-841-3510	Sequence 3510, App	C 362	12.8	2.8	17	1	US-10-342-902-1053	Sequence 1053, App
290	13.4	3.0	17	1	US-10-669-841-6231	Sequence 6231, App	C 363	12.8	2.8	17	1	US-10-138-674-8374	Sequence 8374, App
291	13.4	3.0	17	1	US-10-712-633-490	Sequence 490, App	C 364	12.8	2.8	17	1	US-10-287-949A-8374	Sequence 8374, App
292	13.4	3.0	17	1	US-10-949-004-11	Sequence 11, Appli	C 365	12.8	2.8	17	1	US-10-712-672-757	Sequence 757, App
293	13.4	3.0	17	1	US-10-949-004-12	Sequence 12, Appli	C 366	12.8	2.8	17	1	US-10-712-672-1149	Sequence 1149, App
294	13.4	3.0	17	1	US-10-724-270-6668	Sequence 6668, App	C 367	12.8	2.8	17	1	US-10-669-841-1053	Sequence 1053, App
295	13.4	3.0	17	1	US-10-724-270-6679	Sequence 6679, App	C 368	12.8	2.8	17	1	US-10-669-841-4018	Sequence 4018, App
296	13.4	3.0	17	1	US-10-724-270-6709	Sequence 6709, App	C 369	12.8	2.8	17	1	US-10-669-841-6232	Sequence 6232, App
297	13.4	3.0	17	1	US-10-911-318-41	Sequence 41, Appli	C 370	12.8	2.8	17	1	US-10-669-841-6348	Sequence 6348, App
298	13	2.9	13	1	US-09-893-252-4	Sequence 4, Appli	C 371	12.8	2.8	17	1	US-10-712-633-3415	Sequence 3415, App
299	13	2.9	13	1	US-10-038-335-1	Sequence 1, Appli	C 372	12.8	2.8	17	1	US-10-724-270-1379	Sequence 1379, App
300	13	2.9	13	1	US-10-038-335-2	Sequence 2, Appli	C 373	12.8	2.8	17	1	US-10-724-270-1500	Sequence 1500, App
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303	13	2.9	13	1	US-10-463-076-8	Sequence 8, Appli	C 376	12.8	2.8	17	1	US-10-724-270-5524	Sequence 5524, App
304	13	2.9	13	1	US-10-181-823-18	Sequence 18, Appli							
305	13	2.9	13	1	US-10-181-823-22	Sequence 22, Appli							
306	13	2.9	13	1	US-10-967-755-2	Sequence 2, Appli							
307	13	2.9	13	1	US-10-967-755-8	Sequence 8, Appli							
308	13	2.9	16	1	US-10-618-779-34	Sequence 34, Appli							
309	13	2.9	17	1	US-10-238-700-3509	Sequence 3509, App							
310	13	2.9	17	1	US-10-724-270-2188	Sequence 2188, App							
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314	12.8	2.8	16	1	US-10-730-771-444	Sequence 444, App							
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320	12.8	2.8	17	1	US-09-877-478-1053	Sequence 1053, App							
321	12.8	2.8	17	1	US-09-848-754A-1036	Sequence 1036, App							
322	12.8	2.8	17	1	US-09-848-754A-1037	Sequence 1037, App							
323	12.8	2.8	17	1	US-09-848-754A-1038	Sequence 1038, App							
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325	12.8	2.8	17	1	US-09-848-754A-1653	Sequence 1653, App							

## ALIGNMENTS

## RESULT 1

US-10-714-195-84  
; Sequence 84, Application US/10714195  
; Publication No. US20050019785A1  
; GENERAL INFORMATION:  
; APPLICANT: Baker, Joffre  
; APPLICANT: Cronin, Maureen  
; APPLICANT: Shak, Steve  
; APPLICANT: Baselga, Jose  
; TITLE OF INVENTION: GENE EXPRESSION PROFILING OF EGFR  
; FILE OF INVENTION: POSITIVE CANCER  
; FILE REFERENCE: 39740-0005  
; CURRENT APPLICATION NUMBER: US/10714,195  
; CURRENT FILING DATE: 2003-11-14  
; PRIOR APPLICATION NUMBER: 60/427090  
; PRIOR FILING DATE: 2003-11-15  
; NUMBER OF SEQ ID NOS: 372

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; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 84
; LENGTH: 79
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-714-195-84

Query Match      17.5%; Score 79; DB 1; Length 79;
Best Local Similarity 100.0%; Pred. No. 0.00058;
Matches 79; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 371 AAGAGGAACGGAGCGAGTCCCGCGCGCGCGCGGATTCCTGAGCTGTGGACGTGCACC 430
Db 1 AAGAGGAACGGAGCGAGTCCCGCGCGCGCGCGGATTCCTGAGCTGTGGACGTGCACC 60

QY 431 CAGGACTCGGCTCACACAT 449
Db 61 CAGGACTCGGCTCACACAT 79

RESULT 2
US-10-330-872-1/c
; Sequence 1, Application US/10330872
; Publication No. US20030186282A1
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
; APPLICANT: Weinrich, Scott
; APPLICANT: Atkinson III, Edward
; APPLICANT: Lichtsteiner, Serge
; APPLICANT: Vasserot, Alain
; APPLICANT: Pruzan, Ronald
; TITLE OF INVENTION: Using Purified Telomerase to Identify Telomerase Activators and
; FILE REFERENCE: 011/006C
; CURRENT APPLICATION NUMBER: US/10/330,872
; PRIOR FILING DATE: 2002-12-24
; PRIOR FILING DATE: 1995-08-04
; PRIOR FILING DATE: 1997-04-04
; PRIOR FILING DATE: 1999-10-18
; PRIOR FILING DATE: 1999-10-18
; PRIOR FILING DATE: 2000-11-20
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 1
; LENGTH: 31
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-330-872-1

Query Match      6.9%; Score 31; DB 1; Length 31;
Best Local Similarity 100.0%; Pred. No. 13;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGTCTAACCTTAAGGAGGCGGTAGGC 72
Db 31 TTGTCTAACCTTAAGGAGGCGGTAGGC 1

RESULT 3
US-10-811-033-1/c
; Sequence 1, Application US/10811033
; Publication No. US2005008983A1
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
; APPLICANT: Weinrich, Scott
; APPLICANT: Atkinson III, Edward
; APPLICANT: Lichtsteiner, Serge
; APPLICANT: Vasserot, Alain
; APPLICANT: Pruzan, Ronald
; TITLE OF INVENTION: Using Purified Telomerase to Identify Telomerase Activators and

```

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; TITLE OF INVENTION: Inhibitors
; FILE REFERENCE: 011/006C
; CURRENT APPLICATION NUMBER: US/10/811,033
; CURRENT FILING DATE: 2004-03-26
; PRIOR APPLICATION NUMBER: US/10/330,872A
; PRIOR FILING DATE: 2002-12-24
; PRIOR APPLICATION NUMBER: 08/510,736
; PRIOR FILING DATE: 1995-08-04
; PRIOR APPLICATION NUMBER: 08/833,377
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 09/717,828
; PRIOR FILING DATE: 2000-11-20
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 1
; LENGTH: 31
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-811-033-1

Query Match      6.9%; Score 31; DB 1; Length 31;
Best Local Similarity 100.0%; Pred. No. 13;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGTCTAACCTTAAGGAGGCGGTAGGC 72
Db 31 TTGTCTAACCTTAAGGAGGCGGTAGGC 1

RESULT 4
US-09-057-351-22/c
; Sequence 22, Application US/09057351
; Patent No. US20010034439A1
; GENERAL INFORMATION:
; APPLICANT: Villeeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSER: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,802
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000821US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200

```

```
; TELFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 30 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-09-057-351-22

Query Match          6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 16;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 77 TGCCTTTGCTCCCGCGCGCTGTTTTCTC 106
Db 30 TGCCTTTGCTCCCGCGCGCTGTTTTCTC 1

RESULT 5
US-09-903-461-2/c
; Sequence 2, Application US/09903461
; Publication No. US20020034756A1
; GENERAL INFORMATION:
; APPLICANT: Letsinger, Robert L.
; TITLE OF INVENTION: Method of Detection by Enhancement of Silver Staining
; FILE REFERENCE: 00-1086-A
; CURRENT APPLICATION NUMBER: US/09/903,461
; CURRENT FILING DATE: 2001-07-11
; PRIOR FILING DATE: 2000-07-11
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: Microsoft Word 98
; SEQ ID NO 2
; LENGTH: 30
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic oligomer
US-09-903-461-2

Query Match          6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 16;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 137 CTGCGCGCTTCCACCGTTCTTAGAGC 166
Db 30 CTGCGCGCTTCCACCGTTCTTAGAGC 1

RESULT 6
US-10-359-935-22/c
; Sequence 22, Application US/10359935
; Publication No. US20030153076A1
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; Funk, Walter
; Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS

; TELFAX: (415) 576-0300
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/359,935
; FILING DATE: 07-Feb-2003
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; APPLICATION NUMBER: US 08/472,802
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000821US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 30 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 22:
US-10-359-935-22

Query Match          6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 16;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 77 TGCTTTTGCTCCCGCGCGCTGTTTTCTC 106
Db 30 TGCTTTTGCTCCCGCGCGCTGTTTTCTC 1

RESULT 7
US-10-330-872-4/c
; Sequence 4, Application US/10330872
; Publication No. US20030186282A1
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
; APPLICANT: Weinrich, Scott
; APPLICANT: Atkinson III, Edward
; APPLICANT: Lichtsteiner, Serge
; APPLICANT: Vasserot, Alain
; APPLICANT: Pruzan, Ronald
; TITLE OF INVENTION: Using Purified Telomerase to Identify Telomerase Activators and
; TITLE OF INVENTION: Inhibitors
; FILE REFERENCE: 011/006C
; CURRENT APPLICATION NUMBER: US/10/330,872
; CURRENT FILING DATE: 2002-12-24
; PRIOR APPLICATION NUMBER: 08/510,736
; PRIOR FILING DATE: 1995-08-04
; PRIOR APPLICATION NUMBER: 08/833,377
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 09/717,828
; PRIOR FILING DATE: 2000-11-20
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 4
; LENGTH: 30
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-330-872-4

Query Match          6.7%; Score 30; DB 1; Length 30;
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```
Best Local Similarity 100.0%; Pred. No. 16;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 167 AACACAAAATGTCAGCTGCTGCCCGGTTTC 196
Db 30 AACACAAAATGTCAGCTGCTGCCCGGTTTC 1

RESULT 8
US-10-330-872-5/c
; Sequence 5, Application US/10330872
; Publication No. US20030186282A1
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
; APPLICANT: Weinrich, Scott
; APPLICANT: Atkinson III, Edward
; APPLICANT: Lichtsteiner, Serge
; APPLICANT: Vasserot, Alain
; APPLICANT: Pruzan, Ronald
; TITLE OF INVENTION: Using Purified Telomerase to Identify Telomerase Activators and
; FILE REFERENCE: 011/006C
; CURRENT APPLICATION NUMBER: US/10/330,872
; PRIOR FILING DATE: 2002-12-24
; PRIOR FILING DATE: 1995-08-04
; PRIOR APPLICATION NUMBER: 08/510,736
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 08/833,377
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 09/717,828
; PRIOR FILING DATE: 2000-11-20
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5
; LENGTH: 30
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-330-872-5

Query Match 6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 16;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 137 CCTGCCGCTTCCACCGTTTCATTTCTAGAGC 166
Db 30 CCTGCCGCTTCCACCGTTTCATTTCTAGAGC 1

RESULT 9
US-10-811-033-4/c
; Sequence 4, Application US/10811033
; Publication No. US2005008983A1
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
; APPLICANT: Weinrich, Scott
; APPLICANT: Atkinson III, Edward
; APPLICANT: Lichtsteiner, Serge
; APPLICANT: Vasserot, Alain
; APPLICANT: Pruzan, Ronald
; TITLE OF INVENTION: Using Purified Telomerase to Identify Telomerase Activators and
; FILE REFERENCE: 011/006C
; CURRENT APPLICATION NUMBER: US/10/811,033
; CURRENT FILING DATE: 2004-03-26
; PRIOR FILING DATE: 2002-12-24
; PRIOR APPLICATION NUMBER: US/10/330,872A
; PRIOR FILING DATE: 2002-12-24
; PRIOR APPLICATION NUMBER: 08/510,736
; PRIOR FILING DATE: 1995-08-04
; PRIOR APPLICATION NUMBER: 08/833,377
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 09/717,828
; PRIOR FILING DATE: 2000-11-20
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5
; LENGTH: 30
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-811-033-4

Query Match 6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 16;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 137 CCTGCCGCTTCCACCGTTTCATTTCTAGAGC 166
Db 30 CCTGCCGCTTCCACCGTTTCATTTCTAGAGC 1

RESULT 10
US-10-811-033-5/c
; Sequence 5, Application US/10811033
; Publication No. US2005008983A1
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
; APPLICANT: Weinrich, Scott
; APPLICANT: Atkinson III, Edward
; APPLICANT: Lichtsteiner, Serge
; APPLICANT: Vasserot, Alain
; APPLICANT: Pruzan, Ronald
; TITLE OF INVENTION: Using Purified Telomerase to Identify Telomerase Activators and
; FILE REFERENCE: 011/006C
; CURRENT APPLICATION NUMBER: US/10/811,033
; CURRENT FILING DATE: 2004-03-26
; PRIOR FILING DATE: 2002-12-24
; PRIOR APPLICATION NUMBER: US/10/330,872A
; PRIOR FILING DATE: 2002-12-24
; PRIOR APPLICATION NUMBER: 08/510,736
; PRIOR FILING DATE: 1995-08-04
; PRIOR APPLICATION NUMBER: 08/833,377
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 09/717,828
; PRIOR FILING DATE: 2000-11-20
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5
; LENGTH: 30
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-811-033-5

Query Match 6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 16;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 137 CCTGCCGCTTCCACCGTTTCATTTCTAGAGC 166
Db 30 CCTGCCGCTTCCACCGTTTCATTTCTAGAGC 1

RESULT 11
US-10-330-872-3/c
; Sequence 3, Application US/10330872
; Publication No. US20030186282A1
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
; APPLICANT: Weinrich, Scott
; APPLICANT: Atkinson III, Edward
; APPLICANT: Lichtsteiner, Serge
; APPLICANT: Vasserot, Alain
; APPLICANT: Pruzan, Ronald
```

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; PRIOR APPLICATION NUMBER: 09/717,828
; PRIOR FILING DATE: 2000-11-20
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 4
; LENGTH: 30
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-811-033-4

Query Match 6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 16;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 167 AACACAAAATGTCAGCTGCTGCCCGGTTTC 196
Db 30 AACACAAAATGTCAGCTGCTGCCCGGTTTC 1

RESULT 10
US-10-811-033-5/c
; Sequence 5, Application US/10811033
; Publication No. US2005008983A1
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
; APPLICANT: Weinrich, Scott
; APPLICANT: Atkinson III, Edward
; APPLICANT: Lichtsteiner, Serge
; APPLICANT: Vasserot, Alain
; APPLICANT: Pruzan, Ronald
; TITLE OF INVENTION: Using Purified Telomerase to Identify Telomerase Activators and
; FILE REFERENCE: 011/006C
; CURRENT APPLICATION NUMBER: US/10/811,033
; CURRENT FILING DATE: 2004-03-26
; PRIOR FILING DATE: 2002-12-24
; PRIOR APPLICATION NUMBER: US/10/330,872A
; PRIOR FILING DATE: 2002-12-24
; PRIOR APPLICATION NUMBER: 08/510,736
; PRIOR FILING DATE: 1995-08-04
; PRIOR APPLICATION NUMBER: 08/833,377
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 09/717,828
; PRIOR FILING DATE: 2000-11-20
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5
; LENGTH: 30
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-811-033-5

Query Match 6.7%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 16;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 137 CCTGCCGCTTCCACCGTTTCATTTCTAGAGC 166
Db 30 CCTGCCGCTTCCACCGTTTCATTTCTAGAGC 1

RESULT 11
US-10-330-872-3/c
; Sequence 3, Application US/10330872
; Publication No. US20030186282A1
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
; APPLICANT: Weinrich, Scott
; APPLICANT: Atkinson III, Edward
; APPLICANT: Lichtsteiner, Serge
; APPLICANT: Vasserot, Alain
; APPLICANT: Pruzan, Ronald
```

```

; TITLE OF INVENTION: Using Purified Telomerase to Identify Telomerase Activators and
; TITLE OF INVENTION: Inhibitors
; FILE REFERENCE: 011/006C
; CURRENT APPLICATION NUMBER: US/10/330,872
; CURRENT FILING DATE: 2002-12-24
; PRIOR APPLICATION NUMBER: 08/510,736
; PRIOR FILING DATE: 1995-08-04
; PRIOR APPLICATION NUMBER: 08/833,377
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 09/717,828
; PRIOR FILING DATE: 2000-11-20
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 3
; LENGTH: 30
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-10-330-872-3

Query Match          6.3%; Score 28.4; DB 1; Length 30;
Best Local Similarity 96.7%; Pred. No. 23;
Matches 29; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      412 GAGCTGTGGGACGTGCACCCAGGACTCGGC 441
Db      30 GAGCTATGGGACGTGCACCCAGGACTCGGC 1
|||||
RESULT 12
US-10-811-033-3/c
; Sequence 3, Application US/10811033
; Publication No. US20050089883A1
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
; APPLICANT: Weinrich, Scott
; APPLICANT: Atkinson III, Edward
; APPLICANT: Lichtsteiner, Serge
; APPLICANT: Vasserot, Alain
; APPLICANT: Pruzan, Ronald
; TITLE OF INVENTION: Using Purified Telomerase to Identify Telomerase Activators and
; TITLE OF INVENTION: Inhibitors
; FILE REFERENCE: 011/006C
; CURRENT APPLICATION NUMBER: US/10/811,033
; CURRENT FILING DATE: 2004-03-26
; PRIOR APPLICATION NUMBER: US/10/330,872A
; PRIOR FILING DATE: 2002-12-24
; PRIOR APPLICATION NUMBER: 08/510,736
; PRIOR FILING DATE: 1995-08-04
; PRIOR APPLICATION NUMBER: 08/833,377
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 09/717,828
; PRIOR FILING DATE: 2000-11-20
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 3
; LENGTH: 30
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-10-811-033-3

Query Match          6.3%; Score 28.4; DB 1; Length 30;
Best Local Similarity 96.7%; Pred. No. 23;
Matches 29; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      412 GAGCTGTGGGACGTGCACCCAGGACTCGGC 441
Db      30 GAGCTATGGGACGTGCACCCAGGACTCGGC 1
|||||

```

ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/057,351  
FILING DATE: 08-APR-1994  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/272,102  
FILING DATE: 07-JUL-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/330,123  
FILING DATE: 27-OCT-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/472,802  
FILING DATE: 07-JUN-1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-000821US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 30:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 26 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA  
US-09-057-351-30

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 30;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 45 TCTAACCCCTAACTGAGAGGGCGTAG 70  
|||||  
Db 1 TCTAACCCCTAACTGAGAGGGCGTAG 26

RESULT 15  
US-09-895-606-25  
Sequence 25, Application US/09895606  
Publication No. US20030207404A1  
GENERAL INFORMATION:  
APPLICANT: Villeponteau, Bryant  
Feng, Junli  
Adams, Robert R.  
TITLE OF INVENTION: Methods and Reagents for Regulating  
Telomere Length and Telomerase Activity  
NUMBER OF SEQUENCES: 26  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/895,606  
FILING DATE: 29-Jun-2001  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/710,249  
FILING DATE: <Unknown>  
APPLICATION NUMBER: US 60/003,492  
FILING DATE: 08-SEP-1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-001220US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 25:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 26 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA  
SEQUENCE DESCRIPTION: SEQ ID NO: 25:  
US-09-895-606-25  
Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 30;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 45 TCTAACCCCTAACTGAGAGGGCGTAG 70  
|||||  
Db 1 TCTAACCCCTAACTGAGAGGGCGTAG 26  
RESULT 16  
US-09-895-606-26/c  
Sequence 26, Application US/09895606  
Publication No. US20030207404A1  
GENERAL INFORMATION:  
APPLICANT: Villeponteau, Bryant  
Feng, Junli  
Adams, Robert R.  
TITLE OF INVENTION: Methods and Reagents for Regulating  
Telomere Length and Telomerase Activity  
NUMBER OF SEQUENCES: 26  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor  
CITY: San Francisco  
STATE: California  
COUNTRY: USA  
ZIP: 94111-3834  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/895,606  
FILING DATE: 29-Jun-2001  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/710,249  
FILING DATE: <Unknown>  
APPLICATION NUMBER: US 60/003,492  
FILING DATE: 08-SEP-1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Storella, John R.  
REGISTRATION NUMBER: 32,944  
REFERENCE/DOCKET NUMBER: 015389-001220US  
TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 576-0200  
TELEFAX: (415) 576-0300  
INFORMATION FOR SEQ ID NO: 26:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 26 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
MOLECULE TYPE: DNA  
TOPOLOGY: linear  
SEQUENCE DESCRIPTION: SEQ ID NO: 26:  
US-09-895-606-26

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 30;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATTCTAGACAAAC 170  
|||||  
Db 26 CTTCCACCGTTCATTCTAGACAAAC 1

RESULT 17  
US-10-044-692-311  
; Sequence 311, Application US/10044692  
; Publication No. US20030096344A1  
; GENERAL INFORMATION:  
; APPLICANT: Cech, Thomas R.  
; Lingner, Joachim  
; Nakamura, Toru  
; Chapman, Karen B.  
; Morin, Gregg B.  
; Harley, Calvin  
; Andrews, William H.  
; TITLE OF INVENTION: HUMAN TELOMERASE CATALYTIC SUBUNIT: DIAGNOSTIC AND  
; THERAPEUTIC METHODS  
; NUMBER OF SEQUENCES: 335  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, 8th Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: United States of America  
; ZIP: 94111  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/10/044,692  
; FILING DATE: 11-Jan-2002  
; CLASSIFICATION: <Unknown>  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/912,951  
; FILING DATE: <Unknown>  
; APPLICATION NUMBER: US 08/854,050  
; FILING DATE: 09-MAY-1997  
; APPLICATION NUMBER: US 08/851,843  
; FILING DATE: 06-MAY-1997  
; APPLICATION NUMBER: US 08/846,017  
; FILING DATE: 25-APR-1997  
; APPLICATION NUMBER: US 08/844,419  
; FILING DATE: 01-OCT-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Apple, Randolph T.  
; REGISTRATION NUMBER: 36,429  
; REFERENCE/DOCKET NUMBER: 015389-002600US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 311:

SEQUENCE CHARACTERISTICS:  
LENGTH: 26 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA  
SEQUENCE DESCRIPTION: SEQ ID NO: 311:  
US-10-044-692-311

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 30;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 45 TCTAACCCCTAACTGAGAGGGCGTAG 70  
|||||  
Db 1 TCTAACCCCTAACTGAGAGGGCGTAG 26

RESULT 18  
US-10-044-692-312/c  
; Sequence 312, Application US/10044692  
; Publication No. US20030096344A1  
; GENERAL INFORMATION:  
; APPLICANT: Cech, Thomas R.  
; Lingner, Joachim  
; Nakamura, Toru  
; Chapman, Karen B.  
; Morin, Gregg B.  
; Harley, Calvin  
; Andrews, William H.  
; TITLE OF INVENTION: HUMAN TELOMERASE CATALYTIC SUBUNIT: DIAGNOSTIC AND  
; THERAPEUTIC METHODS  
; NUMBER OF SEQUENCES: 335  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, 8th Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: United States of America  
; ZIP: 94111  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/10/044,692  
; FILING DATE: 11-Jan-2002  
; CLASSIFICATION: <Unknown>  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/912,951  
; FILING DATE: <Unknown>  
; APPLICATION NUMBER: US 08/854,050  
; FILING DATE: 09-MAY-1997  
; APPLICATION NUMBER: US 08/851,843  
; FILING DATE: 06-MAY-1997  
; APPLICATION NUMBER: US 08/846,017  
; FILING DATE: 25-APR-1997  
; APPLICATION NUMBER: US 08/844,419  
; FILING DATE: 18-APR-1997  
; APPLICATION NUMBER: US 08/724,643  
; FILING DATE: 01-OCT-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Apple, Randolph T.  
; REGISTRATION NUMBER: 36,429  
; REFERENCE/DOCKET NUMBER: 015389-002600US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300  
; INFORMATION FOR SEQ ID NO: 312:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 26 base pairs  
; TYPE: nucleic acid

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; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 312:
US-10-044-692-312
Query Match          5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTCATTCTAGAGCAAC 170
Db 26 CTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 19
US-10-044-539-311
; Sequence 311, Application US/10044539
; Publication No. US20030100093A1
; GENERAL INFORMATION:
; APPLICANT: Cech, Thomas R.
; Lingner, Joachim
; Nakamura, Toru
; Chapman, Karen B.
; Morin, Gregg B.
; Harley, Calvin
; Andrews, William H.
;
; TITLE OF INVENTION: HUMAN TELOMERASE CATALYTIC SUBUNIT: DIAGNOSTIC AND
; THERAPEUTIC METHODS
;
; NUMBER OF SEQUENCES: 335
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: United States of America
; ZIP: 94111
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
;
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/044,539
; FILING DATE: 11-Jan-2002
; CLASSIFICATION: 435
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/912,951
; FILING DATE: <Unknown>
; APPLICATION NUMBER: US 08/854,050
; FILING DATE: 09-MAY-1997
; APPLICATION NUMBER: US 08/851,843
; FILING DATE: 06-MAY-1997
; APPLICATION NUMBER: US 08/846,017
; FILING DATE: 25-APR-1997
; APPLICATION NUMBER: US 08/844,419
; FILING DATE: 18-APR-1997
; APPLICATION NUMBER: US 08/724,643
; FILING DATE: 01-OCT-1996
;
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph T.
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 015389-00260005
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
;
; INFORMATION FOR SEQ ID NO: 311:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA

; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 312:
US-10-044-539-311
Query Match          5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 45 TCTAACCCCTAACTGAGAGGGCGTAG 70
Db 1 TCTAACCCCTAACTGAGAGGGCGTAG 26

RESULT 20
US-10-044-539-312/c
; Sequence 312, Application US/10044539
; Publication No. US20030100093A1
; GENERAL INFORMATION:
; APPLICANT: Cech, Thomas R.
; Lingner, Joachim
; Nakamura, Toru
; Chapman, Karen B.
; Morin, Gregg B.
; Harley, Calvin
; Andrews, William H.
;
; TITLE OF INVENTION: HUMAN TELOMERASE CATALYTIC SUBUNIT: DIAGNOSTIC AND
; THERAPEUTIC METHODS
;
; NUMBER OF SEQUENCES: 335
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: United States of America
; ZIP: 94111
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
;
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/044,539
; FILING DATE: 11-Jan-2002
; CLASSIFICATION: 435
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/912,951
; FILING DATE: <Unknown>
; APPLICATION NUMBER: US 08/854,050
; FILING DATE: 09-MAY-1997
; APPLICATION NUMBER: US 08/851,843
; FILING DATE: 06-MAY-1997
; APPLICATION NUMBER: US 08/846,017
; FILING DATE: 25-APR-1997
; APPLICATION NUMBER: US 08/844,419
; FILING DATE: 18-APR-1997
; APPLICATION NUMBER: US 08/724,643
; FILING DATE: 01-OCT-1996
;
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph T.
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 015389-00260005
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
;
; INFORMATION FOR SEQ ID NO: 312:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 312:
US-10-044-539-312
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Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 30;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATTCTAGACAAAC 170  
Db 26 CTTCCACCGTTCATTCTAGACAAAC 1

RESULT 21

US-10-359-935-23/c  
; Sequence 23, Application US/10359935  
; Publication No. US20030153076A1  
; GENERAL INFORMATION:  
; APPLICANT: Villeponteau, Bryant  
; Feng, Junli  
; Funk, Walter  
; Andrews, William H.  
; TITLE OF INVENTION: Mammalian Telomerase  
; NUMBER OF SEQUENCES: 42  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834

COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent in Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/10/359,935  
; FILING DATE: 07-Feb-2003  
; CLASSIFICATION: 435

PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US/09/057,351  
; FILING DATE: 08-APR-1994  
; APPLICATION NUMBER: US 08/272,102  
; FILING DATE: 07-JUL-1994  
; APPLICATION NUMBER: US 08/330,123  
; FILING DATE: 27-OCT-1994  
; APPLICATION NUMBER: US 08/472,802  
; FILING DATE: 07-JUN-1995

ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-000821US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300

INFORMATION FOR SEQ ID NO: 23:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 26 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
; SEQUENCE DESCRIPTION: SEQ ID NO: 23:  
US-10-359-935-23

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 30;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATTCTAGACAAAC 170  
Db 26 CTTCCACCGTTCATTCTAGACAAAC 1

RESULT 22

US-10-359-935-30

; Sequence 30, Application US/10359935  
; Publication No. US20030153076A1  
; GENERAL INFORMATION:  
; APPLICANT: Villeponteau, Bryant  
; Feng, Junli  
; Funk, Walter  
; Andrews, William H.  
; TITLE OF INVENTION: Mammalian Telomerase  
; NUMBER OF SEQUENCES: 42  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834

COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent in Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/10/359,935  
; FILING DATE: 07-Feb-2003  
; CLASSIFICATION: 435

PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US/09/057,351  
; FILING DATE: 08-APR-1994  
; APPLICATION NUMBER: US 08/272,102  
; FILING DATE: 07-JUL-1994  
; APPLICATION NUMBER: US 08/330,123  
; FILING DATE: 27-OCT-1994  
; APPLICATION NUMBER: US 08/472,802  
; FILING DATE: 07-JUN-1995

ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-000821US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; TELEFAX: (415) 576-0300

INFORMATION FOR SEQ ID NO: 30:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 26 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA  
; SEQUENCE DESCRIPTION: SEQ ID NO: 30:  
US-10-359-935-30

Query Match 5.8%; Score 26; DB 1; Length 26;  
Best Local Similarity 100.0%; Pred. No. 30;  
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 45 TCTAACCCCTAACTGAGAAGGCGTAG 70  
Db 1 TCTAACCCCTAACTGAGAAGGCGTAG 26

RESULT 23

US-10-325-810-597  
; Sequence 597, Application US/10325810  
; Publication No. US20030204069A1  
; GENERAL INFORMATION:  
; APPLICANT: Cech, Thomas R.  
; Lingner, Joachim  
; Nakamura, Toru  
; Chapman, Karen B.  
; Morin, Gregg B.  
; Harley, Calvin B.  
; Andrews, William H.  
; TITLE OF INVENTION: Human Telomerase Catalytic Subunit





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; INFORMATION FOR SEQ ID NO: 598:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; FEATURE:
; NAME/KEY: -
; LOCATION: 1..26
; OTHER INFORMATION: /note= "R3c primer"
; SEQUENCE DESCRIPTION: SEQ ID NO: 598:
US-10-877-124-598

Query Match          5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTCATTCTAGAGCAAC 170
Db 26 CTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 27
US-10-877-022-597
; Sequence 597, Application US/10877022
; Publication No. US20040247613A1
; GENERAL INFORMATION:
; APPLICANT: Cech, Thomas R.
; Lingner, Joachim
; Nakamura, Toru
; Chapman, Karen B.
; Morin, Gregg B.
; Harley, Calvin B.
; Andrews, William H.
; TITLE OF INVENTION: Human Telomerase Catalytic Subunit
; NUMBER OF SEQUENCES: 727
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/877,022
; FILING DATE: 24-Jun-2004
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE: 02-Nov-1999
; APPLICATION NUMBER: 08/974,549
; FILING DATE: <Unknown>
; APPLICATION NUMBER: US 08/844,419
; FILING DATE: 18-APR-1997
; APPLICATION NUMBER: US 08/846,017
; FILING DATE: 25-APR-1997
; APPLICATION NUMBER: US 08/851,843
; FILING DATE: 06-MAY-1997
; APPLICATION NUMBER: US 08/854,050
; FILING DATE: 09-MAY-1997
; APPLICATION NUMBER: US 08/911,312
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: US 08/912,951
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: US 08/915,503
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: WO PCT/US97/17618
```

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; FILING DATE: 01-OCT-1997
; APPLICATION NUMBER: WO PCT/US97/17885
; FILING DATE: 01-OCT-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph Ted
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 015389-002610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 597:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; FEATURE:
; NAME/KEY: -
; LOCATION: 1..26
; OTHER INFORMATION: /note= "F3b primer"
; SEQUENCE DESCRIPTION: SEQ ID NO: 597:
US-10-877-022-597

Query Match          5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 45 TCTAACCTTACTGAGAGGGCGTAG 70
Db 1 TCTAACCTTACTGAGAGGGCGTAG 26

RESULT 28
US-10-877-022-598/c
; Sequence 598, Application US/10877022
; Publication No. US20040247613A1
; GENERAL INFORMATION:
; APPLICANT: Cech, Thomas R.
; Lingner, Joachim
; Nakamura, Toru
; Chapman, Karen B.
; Morin, Gregg B.
; Harley, Calvin B.
; Andrews, William H.
; TITLE OF INVENTION: Human Telomerase Catalytic Subunit
; NUMBER OF SEQUENCES: 727
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/877,022
; FILING DATE: 24-Jun-2004
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/432,503
; FILING DATE: 02-Nov-1999
; APPLICATION NUMBER: 08/974,549
; FILING DATE: <Unknown>
; APPLICATION NUMBER: US 08/844,419
; FILING DATE: 18-APR-1997
; APPLICATION NUMBER: US 08/846,017
; FILING DATE: 25-APR-1997
; APPLICATION NUMBER: US 08/851,843
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; FILING DATE: 06-MAY-1997
; APPLICATION NUMBER: US 08/854,050
; FILING DATE: 09-MAY-1997
; APPLICATION NUMBER: US 08/911,312
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: US 08/912,951
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: US 08/915,503
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: WO PCT/US97/17618
; FILING DATE: 01-OCT-1997
; APPLICATION NUMBER: WO PCT/US97/17885
; FILING DATE: 01-OCT-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph Ted
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 015389-002610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 598:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; FEATURE:
; NAME/KEY: -
; LOCATION: 1..26
; OTHER INFORMATION: /note= "R3c primer"
; SEQUENCE DESCRIPTION: SEQ ID NO: 598:
US-10-877-022-598
Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATTCTAGAGCAAC 170
Db 26 CTTCCACCGTTCATTCTAGAGCAAC 1

RESULT 29
US-10-877-146-597
; Sequence 597, Application US/10877146
; Publication No. US20050013825A1
; GENERAL INFORMATION:
; APPLICANT: Cech, Thomas R.
; Lingner, Joachim
; Nakamura, Toru
; Chapman, Karen B.
; Morin, Gregg B.
; Harley, Calvin B.
; Andrews, William H.
; TITLE OF INVENTION: Human Telomerase Catalytic Subunit
; NUMBER OF SEQUENCES: 727
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/877,146
; FILING DATE: 24-Jun-2004
; CLASSIFICATION: <Unknown>
```

```
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/432,503
; FILING DATE: 02-Nov-1999
; APPLICATION NUMBER: 08/974,549
; FILING DATE: <Unknown>
; APPLICATION NUMBER: US 08/844,419
; FILING DATE: 18-APR-1997
; APPLICATION NUMBER: US 08/846,017
; FILING DATE: 25-APR-1997
; APPLICATION NUMBER: US 08/851,843
; FILING DATE: 06-MAY-1997
; APPLICATION NUMBER: US 08/854,050
; FILING DATE: 09-MAY-1997
; APPLICATION NUMBER: US 08/911,312
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: US 08/912,951
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: US 08/915,503
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: WO PCT/US97/17618
; FILING DATE: 01-OCT-1997
; APPLICATION NUMBER: WO PCT/US97/17885
; FILING DATE: 01-OCT-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph Ted
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 015389-002610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 597:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 26 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; FEATURE:
; NAME/KEY: -
; LOCATION: 1..26
; OTHER INFORMATION: /note= "F3b primer"
; SEQUENCE DESCRIPTION: SEQ ID NO: 597:
US-10-877-146-597
Query Match 5.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 45 TCTAACCCCTAACTGAGAGGGCGTAG 70
Db 1 TCTAACCCCTAACTGAGAGGGCGTAG 26

RESULT 30
US-10-877-146-598/c
; Sequence 598, Application US/10877146
; Publication No. US20050013825A1
; GENERAL INFORMATION:
; APPLICANT: Cech, Thomas R.
; Lingner, Joachim
; Nakamura, Toru
; Chapman, Karen B.
; Morin, Gregg B.
; Harley, Calvin B.
; Andrews, William H.
; TITLE OF INVENTION: Human Telomerase Catalytic Subunit
; NUMBER OF SEQUENCES: 727
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
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; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/359,935
; FILING DATE: 07-Feb-2003
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; APPLICATION NUMBER: US 08/472,802
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000821US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 28 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 29:
US-10-359-935-29
Query Match 5.3%; Score 25; DB 1; Length 28;
Best Local Similarity 100.0%; Pred. No. 46;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 81 TTTGCTCCCGCGCGCTGTTTCT 105
Db 25 TTTGCTCCCGCGCGCTGTTTCT 1

RESULT 33
US-09-018-125-4
; Sequence 4, Application US/09018125A
; Patent No. US20010007902A1
; GENERAL INFORMATION:
; APPLICANT: Silverman, Robert H.
; APPLICANT: Kondo, Seiji
; APPLICANT: Cowell, John K.
; APPLICANT: Li, Guiying
; APPLICANT: Torrence, Paul F.
; TITLE OF INVENTION: RNASE L ACTIVATORS AND ANTISENSE OLIGONUCLEOTIDES
; FILE REFERENCE: 8656-022
; CURRENT APPLICATION NUMBER: US/09/018,125A
; CURRENT FILING DATE: 1999-02-03
; EARLIER APPLICATION NUMBER: 60/044,507
; EARLIER FILING DATE: 1997-04-21
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 24
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: primer
US-09-018-125-4
Query Match 5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 41 TTTGCTTAACCCCTAACTGAGAAGG 64
Db 41 TTTGCTTAACCCCTAACTGAGAAGG 64
|||||
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```
Db 1 TTTGCTTAACCCCTAACTGAGAAGG 24

RESULT 34
US-09-018-125-5/c
; Sequence 5, Application US/09018125A
; Patent No. US20010007902A1
; GENERAL INFORMATION:
; APPLICANT: Silverman, Robert H.
; APPLICANT: Kondo, Seiji
; APPLICANT: Cowell, John K.
; APPLICANT: Li, Guiying
; APPLICANT: Torrence, Paul F.
; TITLE OF INVENTION: RNASE L ACTIVATORS AND ANTISENSE OLIGONUCLEOTIDES
; FILE REFERENCE: 8656-022
; CURRENT APPLICATION NUMBER: US/09/018,125A
; CURRENT FILING DATE: 1999-02-03
; EARLIER APPLICATION NUMBER: 60/044,507
; EARLIER FILING DATE: 1997-04-21
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 5
; LENGTH: 24
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: primer
US-09-018-125-5
Query Match 5.3%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 41;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 423 CGTGCAACCCAGGACTCGGCTCACA 446
Db 24 CGTGCAACCCAGGACTCGGCTCACA 1
|||||

RESULT 35
US-10-714-195-345/c
; Sequence 345, Application US/10714195
; Publication No. US20050019785A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Joffre
; APPLICANT: Cronin, Maureen
; APPLICANT: Shak, Steve
; APPLICANT: Baselga, Jose
; TITLE OF INVENTION: GENE EXPRESSION PROFILING OF EGFR
; FILE REFERENCE: 39740-0005
; CURRENT APPLICATION NUMBER: US/10/714,195
; CURRENT FILING DATE: 2003-11-14
; PRIOR APPLICATION NUMBER: 60/427090
; PRIOR FILING DATE: 2003-11-15
; NUMBER OF SEQ ID NOS: 372
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 345
; LENGTH: 23
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: primer
US-10-714-195-345
Query Match 5.1%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 48;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 404 GATTCCCTGAGCTGTGGACGTG 426
Db 23 GATTCCCTGAGCTGTGGACGTG 1
|||||
```

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RESULT 36
US-10-923-330-510
; Sequence 510, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 510
; LENGTH: 23
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-923-330-510

Query Match          5.1%; Score 23; DB 1; Length 23;
Best Local Similarity 82.6%; Pred. No. 48;
Matches 19; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy      2 GGTTCGGAGGGTGGCGCTGGGA 24
Db      1 GGUUGCGAGGGUGGCGCCUGGA 23

RESULT 37
US-10-923-330-511
; Sequence 511, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
```

```
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 511
; LENGTH: 23
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-923-330-511

Query Match          5.1%; Score 23; DB 1; Length 23;
Best Local Similarity 73.9%; Pred. No. 48;
Matches 17; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

Qy      136 GCCTGCGCCTTCCACCGTTTCAT 158
Db      1 GCGUGCGCCUCCACCGUUCAU 23

RESULT 38
US-10-923-330-512
; Sequence 512, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 512
; LENGTH: 23
; TYPE: RNA
```



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; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense x
US-10-923-330-512

Query Match          5.1%; Score 23; DB 1; Length 23;
Best Local Similarity 95.7%; Pred. No. 48;
Matches 22; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 283 GCACCCACTGCACCGCAGAG 305
      |||||:|||||
Db 1 GCACCCACUGCCACCGCAGAG 23

RESULT 39
US-10-923-330-513
; Sequence 513, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 513
; LENGTH: 23
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense x
US-10-923-330-513

Query Match          5.1%; Score 23; DB 1; Length 23;
Best Local Similarity 82.6%; Pred. No. 48;
Matches 19; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 395 GCGCGGCGCGATTCCTGAGCTG 417
      |||||:|||||
Db 1 GCGCGGCGCGAUCCUGAGCUG 23

RESULT 40
US-10-923-330-515
; Sequence 515, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
```

```
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 515
; LENGTH: 23
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense x
US-10-923-330-515

Query Match          5.1%; Score 23; DB 1; Length 23;
Best Local Similarity 69.6%; Pred. No. 48;
Matches 16; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

Qy 143 GCCTTCACCGTTCATCTAGAG 165
      |||:|||||:|:|:|
Db 1 GCCUCCACGCUCAUUCUAGAG 23

RESULT 41
US-10-923-330-516
; Sequence 516, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
```

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/ PRIOR FILING DATE: 2003-11-23
/ PRIOR APPLICATION NUMBER: US 10/444,853
/ PRIOR FILING DATE: 2003-05-23
/ PRIOR APPLICATION NUMBER: PCT/US03/05346
/ PRIOR FILING DATE: 2003-02-20
/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ PRIOR FILING DATE: 2003-02-20
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 516
/ LENGTH: 23
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense
US-10-923-330-516

Query Match
Best Local Similarity 5.1%; Score 23; DB 1; Length 23;
Matches 16; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

QY 144 CTTCCACCGTTCATTCTAGAGC 166
Db 1 CCUCCACCGUUAUCUAGAGC 23

RESULT 42
US-10-923-330-517
/ Sequence 517, Application US/10923330
/ Publication No. US20050153916A1
/ GENERAL INFORMATION:
/ APPLICANT: Sirna Therapeutics, Inc.
/ APPLICANT: McSwiggen, James
/ TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
/ FILE REFERENCE: 400/209 (MBHB02-708-C)
/ CURRENT APPLICATION NUMBER: US/10/923,330
/ CURRENT FILING DATE: 2004-08-20
/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 10/826,966
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-11-23
/ PRIOR APPLICATION NUMBER: US 10/444,853
/ PRIOR FILING DATE: 2003-05-23
/ PRIOR APPLICATION NUMBER: PCT/US03/05346
/ PRIOR FILING DATE: 2003-02-20
/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 517
/ LENGTH: 23
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense
US-10-923-330-517

Query Match
Best Local Similarity 5.1%; Score 23; DB 1; Length 23;
Matches 16; Conservative 7; Mismatches 0; Indels 0; Gaps 0;
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```
Matches 16; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTCATTCTAGAGCA 167
Db 1 CUUCCACCGUUAUCUAGAGCA 23

RESULT 43
US-10-923-330-518
/ Sequence 518, Application US/10923330
/ Publication No. US20050153916A1
/ GENERAL INFORMATION:
/ APPLICANT: Sirna Therapeutics, Inc.
/ APPLICANT: McSwiggen, James
/ APPLICANT: Beigelman, Leonid
/ TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
/ FILE REFERENCE: 400/209 (MBHB02-708-C)
/ CURRENT APPLICATION NUMBER: US/10/923,330
/ CURRENT FILING DATE: 2004-08-20
/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 10/826,966
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-11-23
/ PRIOR APPLICATION NUMBER: US 10/444,853
/ PRIOR FILING DATE: 2003-05-23
/ PRIOR APPLICATION NUMBER: PCT/US03/05346
/ PRIOR FILING DATE: 2003-02-20
/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 518
/ LENGTH: 23
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense
US-10-923-330-518

Query Match
Best Local Similarity 5.1%; Score 23; DB 1; Length 23;
Matches 16; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

QY 146 TTCACCGTTCATTCTAGAGCAA 168
Db 1 UUCCACCGUUAUCUAGAGCAA 23

RESULT 44
US-10-923-330-519
/ Sequence 519, Application US/10923330
/ Publication No. US20050153916A1
/ GENERAL INFORMATION:
/ APPLICANT: Sirna Therapeutics, Inc.
/ APPLICANT: McSwiggen, James
/ APPLICANT: Beigelman, Leonid
/ TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
/ FILE REFERENCE: 400/209 (MBHB02-708-C)
/ CURRENT APPLICATION NUMBER: US/10/923,330
/ CURRENT FILING DATE: 2004-08-20
```

; PRIOR APPLICATION NUMBER: PCT/US03/04088  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 60/396,600  
; PRIOR FILING DATE: 2002-07-17  
; PRIOR APPLICATION NUMBER: PCT/US04/16390  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 10/826,966  
; PRIOR FILING DATE: 2004-04-16  
; PRIOR APPLICATION NUMBER: US 10/757,803  
; PRIOR FILING DATE: 2004-01-14  
; PRIOR APPLICATION NUMBER: US 10/720,448  
; PRIOR FILING DATE: 2003-11-24  
; PRIOR APPLICATION NUMBER: US 10/693,059  
; PRIOR FILING DATE: 2003-11-23  
; PRIOR APPLICATION NUMBER: US 10/444,853  
; PRIOR FILING DATE: 2003-05-23  
; PRIOR APPLICATION NUMBER: PCT/US03/05346  
; PRIOR FILING DATE: 2003-02-20  
; PRIOR APPLICATION NUMBER: PCT/US03/05028  
; PRIOR FILING DATE: 2003-02-20  
; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 768  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 519  
; LENGTH: 23  
; TYPE: RNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r

US-10-923-330-519

Query Match 5.1%; Score 23; DB 1; Length 23;  
Best Local Similarity 73.9%; Pred.No. 48;  
Matches 17; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

Qy 147 TCACCGTTTCATTCTAGAGCAA 169  
Db 1 UCCACCGUUAUCUAGAGCAA 23

RESULT 45  
US-10-923-330-520  
; Sequence 520, Application US/10923330  
; Publication No. US20050153916A1  
; GENERAL INFORMATION:  
; APPLICANT: McSwiggen, James  
; APPLICANT: Beigelman, Leonid  
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
; FILE REFERENCE: 400/209 (MBHB02-708-C)  
; CURRENT APPLICATION NUMBER: US/10/923,330  
; PRIOR FILING DATE: 2004-08-20  
; PRIOR APPLICATION NUMBER: PCT/US03/04088  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 60/396,600  
; PRIOR FILING DATE: 2002-07-17  
; PRIOR APPLICATION NUMBER: PCT/US04/16390  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 10/826,966  
; PRIOR FILING DATE: 2004-04-16  
; PRIOR APPLICATION NUMBER: US 10/757,803  
; PRIOR FILING DATE: 2004-01-14  
; PRIOR APPLICATION NUMBER: US 10/720,448  
; PRIOR FILING DATE: 2003-11-24  
; PRIOR APPLICATION NUMBER: US 10/693,059  
; PRIOR FILING DATE: 2003-11-23  
; PRIOR APPLICATION NUMBER: US 10/444,853  
; PRIOR FILING DATE: 2003-05-23  
; PRIOR APPLICATION NUMBER: PCT/US03/05346  
; PRIOR FILING DATE: 2003-02-20  
; PRIOR APPLICATION NUMBER: PCT/US03/05028  
; PRIOR FILING DATE: 2003-02-20

; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 768  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 520  
; LENGTH: 23  
; TYPE: RNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r

US-10-923-330-520

Qy 148 CCACCGTTTCATTCTAGAGCAAAC 170  
Db 1 CCACCGUUAUCUAGAGCAAAC 23

RESULT 46  
US-10-923-330-521  
; Sequence 521, Application US/10923330  
; Publication No. US20050153916A1  
; GENERAL INFORMATION:  
; APPLICANT: McSwiggen, James  
; APPLICANT: Beigelman, Leonid  
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
; FILE REFERENCE: 400/209 (MBHB02-708-C)  
; CURRENT APPLICATION NUMBER: US/10/923,330  
; PRIOR FILING DATE: 2004-08-20  
; PRIOR APPLICATION NUMBER: PCT/US03/04088  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 60/396,600  
; PRIOR FILING DATE: 2002-07-17  
; PRIOR APPLICATION NUMBER: PCT/US04/16390  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 10/826,966  
; PRIOR FILING DATE: 2004-04-16  
; PRIOR APPLICATION NUMBER: US 10/757,803  
; PRIOR FILING DATE: 2004-01-14  
; PRIOR APPLICATION NUMBER: US 10/720,448  
; PRIOR FILING DATE: 2003-11-24  
; PRIOR APPLICATION NUMBER: US 10/693,059  
; PRIOR FILING DATE: 2003-11-23  
; PRIOR APPLICATION NUMBER: US 10/444,853  
; PRIOR FILING DATE: 2003-05-23  
; PRIOR APPLICATION NUMBER: PCT/US03/05346  
; PRIOR FILING DATE: 2003-02-20  
; PRIOR APPLICATION NUMBER: PCT/US03/05028  
; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 768  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 521  
; LENGTH: 23  
; TYPE: RNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r

US-10-923-330-521

Qy 298 GCGAAGAGTTGGGCTCTGTGACG 320  
Db 1 GCGAAGAGUUGGCGUCUGACG 23

RESULT 47  
US-09-057-351-41/c  
; Sequence 41, Application US/09057351  
; Patent No. US20010034439A1  
; GENERAL INFORMATION:  
; APPLICANT: Villeponteau, Bryant  
; APPLICANT: Feng, Junli  
; APPLICANT: Funk, Walter  
; APPLICANT: Andrews, William H.  
; TITLE OF INVENTION: Mammalian Telomerase  
; NUMBER OF SEQUENCES: 42  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/057,351  
; FILING DATE: 08-APR-1994  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/272,102  
; FILING DATE: 07-JUL-1994  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/330,123  
; FILING DATE: 27-OCT-1994  
; APPLICATION NUMBER: US 08/472,802  
; FILING DATE: 07-JUN-1995  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-000821US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; INFORMATION FOR SEQ ID NO: 41:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 22 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: RNA  
US-09-057-351-41

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 55;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 46 CTAACCCCTAACTGAGAGGGCG 67  
Db 22 CTAACCCCTAACTGAGAGGGCG 1

RESULT 48  
US-09-057-351-42/c  
; Sequence 42, Application US/09057351  
; Patent No. US20010034439A1  
; GENERAL INFORMATION:  
; APPLICANT: Villeponteau, Bryant  
; APPLICANT: Feng, Junli  
; APPLICANT: Funk, Walter  
; APPLICANT: Andrews, William H.  
; TITLE OF INVENTION: Mammalian Telomerase  
; NUMBER OF SEQUENCES: 42  
; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/057,351  
; FILING DATE: 08-APR-1994  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/272,102  
; FILING DATE: 07-JUL-1994  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/330,123  
; FILING DATE: 27-OCT-1994  
; APPLICATION NUMBER: US 08/472,802  
; FILING DATE: 07-JUN-1995  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Storella, John R.  
; REGISTRATION NUMBER: 32,944  
; REFERENCE/DOCKET NUMBER: 015389-000821US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 576-0200  
; INFORMATION FOR SEQ ID NO: 42:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 22 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: RNA  
US-09-057-351-42

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 55;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 54 AACTGAGAGGGCGTAGGCGCC 75  
Db 22 AACTGAGAGGGCGTAGGCGCC 1

RESULT 49  
US-10-359-935-41/c  
; Sequence 41, Application US/10359935  
; Publication No. US20030153076A1  
; GENERAL INFORMATION:  
; APPLICANT: Villeponteau, Bryant  
; APPLICANT: Feng, Junli  
; APPLICANT: Funk, Walter  
; APPLICANT: Andrews, William H.  
; TITLE OF INVENTION: Mammalian Telomerase  
; NUMBER OF SEQUENCES: 42  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Townsend and Townsend and Crew LLP  
; STREET: Two Embarcadero Center, Eighth Floor  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111-3834  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:

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; APPLICATION NUMBER: US/10/359,935
; FILING DATE: 07-Feb-2003
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; APPLICATION NUMBER: US 08/472,802
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000821US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 41:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: RNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 41:
US-10-359-935-41

Query Match          4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 55;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      46 CTAACCCCTAACTGAGAGGGCG 67
Db      22 CTAACCCCTAACTGAGAGGGCG 1

RESULT 50
US-10-359-935-42/c
; Sequence 42, Application US/10359935
; Publication No. US20030153076A1
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; Funk, Junli
; Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/359,935
; FILING DATE: 07-Feb-2003
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; APPLICATION NUMBER: US 08/472,802
```

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; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000821US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 42:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: RNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 42:
US-10-359-935-42

Query Match          4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 55;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      54 AACTGAGAGGGCGGTAGGCGCC 75
Db      22 AACTGAGAGGGCGGTAGGCGCC 1

RESULT 51
US-10-330-872-2/c
; Sequence 2, Application US/10330872
; Publication No. US20030186282A1
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
; APPLICANT: Weinrich, Scott
; APPLICANT: Atkinson III, Edward
; APPLICANT: Lichtsteiner, Serge
; APPLICANT: Vasserot, Alain
; APPLICANT: Pruzan, Ronald
; TITLE OF INVENTION: Using Purified Telomerase to Identify Telomerase Activators and
; FILE OF INVENTION: Inhibitors
; FILE REFERENCE: 011/006C
; CURRENT APPLICATION NUMBER: US/10/330,872
; CURRENT FILING DATE: 2002-12-24
; PRIOR APPLICATION NUMBER: 08/510,736
; PRIOR FILING DATE: 1995-08-04
; PRIOR APPLICATION NUMBER: 08/833,377
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 09/717,828
; PRIOR FILING DATE: 2000-11-20
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
; LENGTH: 22
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-330-872-2

Query Match          4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 55;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      46 CTAACCCCTAACTGAGAGGGCG 67
Db      22 CTAACCCCTAACTGAGAGGGCG 1

RESULT 52
US-10-931-266-12
; Sequence 12, Application US/10831266
; Publication No. US20050003404A1
; GENERAL INFORMATION:
```

; APPLICANT: Rowley, Peter T.  
; TITLE OF INVENTION: TELOMERASE INTERFERENCE  
; FILE REFERENCE: A-71506-1/RFT/THR  
; CURRENT APPLICATION NUMBER: US/10/831,266  
; CURRENT FILING DATE: 2004-04-22  
; PRIOR APPLICATION NUMBER: PCT/US 02/33065  
; PRIOR FILING DATE: 2002-10-16  
; PRIOR APPLICATION NUMBER: US 60/345,326  
; PRIOR FILING DATE: 2001-10-22  
; PRIOR APPLICATION NUMBER: US 60/359,196  
; PRIOR FILING DATE: 2002-02-20  
; PRIOR APPLICATION NUMBER: US 60/383,195  
; PRIOR FILING DATE: 2002-05-22  
; NUMBER OF SEQ ID NOS: 17  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 12  
; LENGTH: 22  
; TYPE: DNA  
; ORGANISM: Artificial  
; FEATURE:  
; OTHER INFORMATION: primer  
US-10-831-266-12

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 55;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 19 CTGGGAGGGGTGGTGCCATT 40  
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Db 1 CTGGGAGGGGTGGTGCCATT 22

## RESULT 53

US-10-831-266-13/c  
; Sequence 13, Application US/10831266  
; Publication No. US20050003404A1  
; GENERAL INFORMATION:  
; APPLICANT: Rowley, Peter T.  
; TITLE OF INVENTION: TELOMERASE INTERFERENCE  
; FILE REFERENCE: A-71506-1/RFT/THR  
; CURRENT APPLICATION NUMBER: US/10/831,266  
; CURRENT FILING DATE: 2004-04-22  
; PRIOR APPLICATION NUMBER: PCT/US 02/33065  
; PRIOR FILING DATE: 2002-10-16  
; PRIOR APPLICATION NUMBER: US 60/345,326  
; PRIOR FILING DATE: 2001-10-22  
; PRIOR APPLICATION NUMBER: US 60/359,196  
; PRIOR FILING DATE: 2002-02-20  
; PRIOR APPLICATION NUMBER: US 60/383,195  
; PRIOR FILING DATE: 2002-05-22  
; NUMBER OF SEQ ID NOS: 17  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 13  
; LENGTH: 22  
; TYPE: DNA  
; ORGANISM: Artificial  
; FEATURE:  
; OTHER INFORMATION: primer  
US-10-831-266-13

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 55;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 176 ATGTCAGCTGCTGGCCCGTTGC 197  
|||||  
Db 22 ATGTCAGCTGCTGGCCCGTTGC 1

## RESULT 54

US-10-831-267-12  
; Sequence 12, Application US/10831267  
; Publication No. US20050009177A1

; GENERAL INFORMATION:  
; APPLICANT: Rowley, Peter T.  
; TITLE OF INVENTION: TELOMERASE INTERFERENCE  
; FILE REFERENCE: A-71506-2/RFT/THR  
; CURRENT APPLICATION NUMBER: US/10/831,267  
; CURRENT FILING DATE: 2004-04-22  
; PRIOR APPLICATION NUMBER: PCT/US 02/33146  
; PRIOR FILING DATE: 2002-10-16  
; PRIOR APPLICATION NUMBER: US 60/345,326  
; PRIOR FILING DATE: 2001-10-22  
; PRIOR APPLICATION NUMBER: US 60/359,196  
; PRIOR FILING DATE: 2002-02-20  
; PRIOR APPLICATION NUMBER: US 60/383,195  
; PRIOR FILING DATE: 2002-05-22  
; NUMBER OF SEQ ID NOS: 23  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 12  
; LENGTH: 22  
; TYPE: DNA  
; ORGANISM: Artificial  
; FEATURE:  
; OTHER INFORMATION: primer  
US-10-831-267-12

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 55;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 19 CTGGGAGGGGTGGTGCCATT 40  
|||||  
Db 1 CTGGGAGGGGTGGTGCCATT 22

## RESULT 55

US-10-831-267-13/c  
; Sequence 13, Application US/10831267  
; Publication No. US20050009177A1  
; GENERAL INFORMATION:  
; APPLICANT: Rowley, Peter T.  
; TITLE OF INVENTION: TELOMERASE INTERFERENCE  
; FILE REFERENCE: A-71506-2/RFT/THR  
; CURRENT APPLICATION NUMBER: US/10/831,267  
; CURRENT FILING DATE: 2004-04-22  
; PRIOR APPLICATION NUMBER: PCT/US 02/33146  
; PRIOR FILING DATE: 2002-10-16  
; PRIOR APPLICATION NUMBER: US 60/345,326  
; PRIOR FILING DATE: 2001-10-22  
; PRIOR APPLICATION NUMBER: US 60/359,196  
; PRIOR FILING DATE: 2002-02-20  
; PRIOR APPLICATION NUMBER: US 60/383,195  
; NUMBER OF SEQ ID NOS: 23  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 13  
; LENGTH: 22  
; TYPE: DNA  
; ORGANISM: Artificial  
; FEATURE:  
; OTHER INFORMATION: primer  
US-10-831-267-13

Query Match 4.9%; Score 22; DB 1; Length 22;  
Best Local Similarity 100.0%; Pred. No. 55;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 176 ATGTCAGCTGCTGGCCCGTTGC 197  
|||||  
Db 22 ATGTCAGCTGCTGGCCCGTTGC 1

## RESULT 56

US-10-811-033-2/c  
; Sequence 2, Application US/10811033

```
; Publication No. US2005008983A1
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
; APPLICANT: Weinrich, Scott
; APPLICANT: Atkinson III, Edward
; APPLICANT: Lichtesteiner, Serge
; APPLICANT: Vasserot, Alain
; APPLICANT: Pruzan, Ronald
; TITLE OF INVENTION: Using Purified Telomerase to Identify Telomerase Activators and
; FILE REFERENCE: 011/006C
; CURRENT APPLICATION NUMBER: US/10/811,033
; CURRENT FILING DATE: 2004-03-26
; PRIOR FILING DATE: US/10/330,872A
; PRIOR FILING DATE: 2002-12-24
; PRIOR APPLICATION NUMBER: 08/510,736
; PRIOR FILING DATE: 1995-08-04
; PRIOR APPLICATION NUMBER: 08/833,377
; PRIOR FILING DATE: 1997-04-04
; PRIOR APPLICATION NUMBER: 09/420,056
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 09/717,828
; PRIOR FILING DATE: 2000-11-20
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
; LENGTH: 22
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-10-811-033-2

Query Match 4.9%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 55;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTGAGAAGGCG 67
Db 22 CTAACCCCTAACTGAGAAGGCG 1

RESULT 57
US-09-057-351-25/c
; Sequence 25, Application US/09057351
; Patent No. US20010034439A1
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; APPLICATION NUMBER: US 08/472,802
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000821US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
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; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/472,802
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000821US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; US-09-057-351-25

Query Match 4.7%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 64;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 184 TGCTGGCCGCTTCGCCCTCC 204
Db 21 TGCTGGCCGCTTCGCCCTCC 1

RESULT 58
US-10-359-935-25/c
; Sequence 25, Application US/10359935
; Publication No. US20030153076A1
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; APPLICANT: Feng, Junli
; APPLICANT: Funk, Walter
; APPLICANT: Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/359,935
; FILING DATE: 07-Feb-2003
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; APPLICATION NUMBER: US 08/472,802
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000821US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
```

```
;
; LENGTH: 21 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 25:
US-10-359-935-25

Query Match          4.7%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 64;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 184 TGTGCGCGGCTTCCGCCCTCC 204
DB 21 TGTGCGCGGCTTCCGCCCTCC 1

RESULT 59
US-10-923-330-536
; Sequence 536, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MEHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR FILING DATE: 2002-07-17
; PRIOR FILING DATE: 2004-05-24
; PRIOR FILING DATE: 2004-05-24
; PRIOR FILING DATE: 2004-04-16
; PRIOR FILING DATE: 2004-04-16
; PRIOR FILING DATE: 2004-01-14
; PRIOR FILING DATE: 2004-01-14
; PRIOR FILING DATE: 2003-11-24
; PRIOR FILING DATE: 2003-11-23
; PRIOR FILING DATE: 2003-05-23
; PRIOR FILING DATE: 2003-05-23
; PRIOR FILING DATE: 2003-02-20
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 536
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
US-10-923-330-537

Query Match          4.7%; Score 21; DB 1; Length 21;
Best Local Similarity 71.4%; Pred. No. 64;
Matches 15; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

QY 138 CTGCGCGCTTCCACCGTTCAT 158
DB 1 CUGCGCGCUUCCACCGUUCAU 21

RESULT 61
US-10-923-330-538
; Sequence 538, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MEHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR FILING DATE: 2002-07-17
; PRIOR FILING DATE: 2004-05-24
; PRIOR FILING DATE: 2004-05-24
; PRIOR FILING DATE: 2004-04-16
; PRIOR FILING DATE: 2004-04-16
; PRIOR FILING DATE: 2004-01-14
; PRIOR FILING DATE: 2004-01-14
; PRIOR FILING DATE: 2003-11-24
; PRIOR FILING DATE: 2003-11-23
; PRIOR FILING DATE: 2003-05-23
; PRIOR FILING DATE: 2003-05-23
; PRIOR FILING DATE: 2003-02-20
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 536
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
US-10-923-330-539

Query Match          4.7%; Score 21; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 64;
Matches 17; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 4 TTGCGGAGGCTGGCGCTGGGA 24
DB 1 UTGCGGAGGCGGCGGCGGGA 21

RESULT 60
US-10-923-330-537
; Sequence 537, Application US/10923330
```



```
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 538
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; US-10-923-330-538

Query Match          4.7%; Score 21; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 64;
Matches 20; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 285 ACCCACTGCCACCGCGAAGAG 305
Db 1 ACCCACUGCCACCGCGAAGAG 21
|||||:|||||:|||||:|||||:|||||:

RESULT 62
US-10-923-330-539
; Sequence 539, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923.330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 541
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; US-10-923-330-541

Query Match          4.7%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 64;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 GGTTCGCGAGGCTGGCCTGG 22
Db 21 GGTTCGCGAGGCTGGCCTGG 1
|||||:|||||:|||||:|||||:|||||:

RESULT 64
US-10-923-330-542/c
; Sequence 542, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; OTHER INFORMATION: Expression Using Short Interfering RNA (siNA)
```

```
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 542
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-542

Query Match          4.7%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 64;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 136 GCCTGCCGCTTCCACCGTTC 156
Db 21 GCCTGCCGCTTCCACCGTTC 1

RESULT 65
US-10-923-330-543/c
; Sequence 543, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 543
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-543

Query Match          4.7%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 64;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 136 GCCTGCCGCTTCCACCGTTC 156
Db 21 GCCTGCCGCTTCCACCGTTC 1

RESULT 66
US-10-923-330-544/c
; Sequence 544, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 544
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-544

Query Match          4.7%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 64;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 395 GCGCGCGCGATTCCCTGAGC 415
Db 21 GCGCGCGCGATTCCCTGAGC 1
```

```
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 543
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-543

Query Match          4.7%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 64;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 283 GCACCCACTGCCACCGCGAAG 303
Db 21 GCACCCACTGCCACCGCGAAG 1

RESULT 66
US-10-923-330-544/c
; Sequence 544, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 544
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-544

Query Match          4.7%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 64;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 395 GCGCGCGCGATTCCCTGAGC 415
Db 21 GCGCGCGCGATTCCCTGAGC 1
```



```
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/359,935
; FILING DATE: 07-FEB-2003
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; APPLICATION NUMBER: US 08/472,802
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000821US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0300
; TELEFAX: (415) 576-0300
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 7:
US-10-359-935-7

Query Match      4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  2 GGTTCGGAGGTGGGCGTG 21
Db  20 GGTTCGGAGGTGGGCGTG 1

RESULT 70
US-10-359-935-40/c
; Sequence 40, Application US/10359935
; Publication No. US20030153076A1
; GENERAL INFORMATION:
; APPLICANT: Villeponteau, Bryant
; Feng, Junli
; Funk, Walter
; Andrews, William H.
; TITLE OF INVENTION: Mammalian Telomerase
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/359,935
; FILING DATE: 07-FEB-2003
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/057,351
; FILING DATE: 08-APR-1994
; APPLICATION NUMBER: US 08/272,102
; FILING DATE: 07-JUL-1994
```

```
; APPLICATION NUMBER: US 08/330,123
; FILING DATE: 27-OCT-1994
; APPLICATION NUMBER: US 08/472,802
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Storella, John R.
; REGISTRATION NUMBER: 32,944
; REFERENCE/DOCKET NUMBER: 015389-000821US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0300
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 40:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: RNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 40:
US-10-359-935-40

Query Match      4.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  41 TTGTCTAACCTTAAGTGAG 60
Db  20 TTGTCTAACCTTAAGTGAG 1

RESULT 71
US-09-018-125-2/c
; Sequence 2, Application US/09018125A
; Patent No. US20010007902A1
; GENERAL INFORMATION:
; APPLICANT: Silverman, Robert H.
; APPLICANT: Kondo, Seiji
; APPLICANT: Cowell, John K.
; APPLICANT: Li, Guivying
; APPLICANT: Torrence, Paul F.
; TITLE OF INVENTION: RNASE L ACTIVATORS AND ANTISENSE OLIGONUCLEOTIDES
; TITLE OF INVENTION: EFFECTIVE TO TREAT TELOMERASE-EXPRESSING MALIGNANCIES
; FILE REFERENCE: 8656-022
; CURRENT APPLICATION NUMBER: US/09/018,125A
; CURRENT FILING DATE: 1999-02-03
; EARLIER APPLICATION NUMBER: 60/044,507
; EARLIER FILING DATE: 1997-04-21
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:
; OTHER INFORMATION: oligonucleotide
US-09-018-125-2

Query Match      4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  76 GTGCTTTTGCTCCCGCGC 94
Db  19 GTGCTTTTGCTCCCGCGC 1

RESULT 72
US-10-016-490C-8
; Sequence 8, Application US/10016490C
; Publication No. US2004007269A1
; GENERAL INFORMATION:
; APPLICANT: Yin, James Q.
```

; TITLE OF INVENTION: Methods for design and selection of short double-stranded  
; FILE REFERENCE: 01-2793  
; CURRENT APPLICATION NUMBER: US/10/016.490C  
; CURRENT FILING DATE: 2002-11-22  
; NUMBER OF SEQ ID NOS: 51  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 8  
; LENGTH: 19  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: The same as those in human.  
US-10-016-490C-8

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 82;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 372 AGAGGAACGGAGCGAGTCC 390  
|||:|||||:|||||:|||||  
Db 1 AGAGGAACGGAGCGAGTCC 19

## RESULT 73

US-10-831-267-16  
; Sequence 16, Application US/10831267  
; Publication No. US20050009177A1  
; GENERAL INFORMATION:  
; APPLICANT: Rowley, Peter T.  
; TITLE OF INVENTION: TELOMERASE INTERFERENCE  
; FILE REFERENCE: A-71506-2/RFT/THR  
; CURRENT APPLICATION NUMBER: US/10/831.267  
; CURRENT FILING DATE: 2004-04-22  
; PRIOR APPLICATION NUMBER: PCT/US 02/33146  
; PRIOR FILING DATE: 2002-10-16  
; PRIOR APPLICATION NUMBER: US 60/345,326  
; PRIOR FILING DATE: 2001-10-22  
; PRIOR APPLICATION NUMBER: US 60/359,196  
; PRIOR FILING DATE: 2002-02-20  
; PRIOR APPLICATION NUMBER: US 60/383,195  
; PRIOR FILING DATE: 2002-05-22  
; NUMBER OF SEQ ID NOS: 23  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 16  
; LENGTH: 19  
; TYPE: RNA  
; ORGANISM: Artificial  
; FEATURE:  
; OTHER INFORMATION: oligonucleotide  
US-10-831-267-16

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 68.4%; Pred. No. 82;  
Matches 13; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGCTAACCCCTAACTGAG 60  
:|:|:|||||:|||||  
Db 1 UUGUCUAAACCUACUGAG 19

## RESULT 74

US-10-831-267-17/c  
; Sequence 17, Application US/10831267  
; Publication No. US20050009177A1  
; GENERAL INFORMATION:  
; APPLICANT: Rowley, Peter T.  
; TITLE OF INVENTION: TELOMERASE INTERFERENCE  
; FILE REFERENCE: A-71506-2/RFT/THR  
; CURRENT APPLICATION NUMBER: US/10/831.267  
; CURRENT FILING DATE: 2004-04-22  
; PRIOR APPLICATION NUMBER: PCT/US 02/33146  
; PRIOR FILING DATE: 2002-10-16

; PRIOR APPLICATION NUMBER: US 60/345,326  
; PRIOR FILING DATE: 2001-10-22  
; PRIOR APPLICATION NUMBER: US 60/359,196  
; PRIOR FILING DATE: 2002-02-20  
; PRIOR APPLICATION NUMBER: US 60/383,195  
; PRIOR FILING DATE: 2002-05-22  
; NUMBER OF SEQ ID NOS: 23  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 17  
; LENGTH: 19  
; TYPE: RNA  
; ORGANISM: Artificial  
; FEATURE:  
; OTHER INFORMATION: oligonucleotide  
US-10-831-267-17

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 82;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGCTAACCCCTAACTGAG 60  
|||:|||||:|||||:|||||  
Db 19 TTGCTAACCCCTAACTGAG 1

## RESULT 75

US-10-831-267-18  
; Sequence 18, Application US/10831267  
; Publication No. US20050009177A1  
; GENERAL INFORMATION:  
; APPLICANT: Rowley, Peter T.  
; TITLE OF INVENTION: TELOMERASE INTERFERENCE  
; FILE REFERENCE: A-71506-2/RFT/THR  
; CURRENT APPLICATION NUMBER: US/10/831.267  
; CURRENT FILING DATE: 2004-04-22  
; PRIOR APPLICATION NUMBER: PCT/US 02/33146  
; PRIOR FILING DATE: 2002-10-16  
; PRIOR APPLICATION NUMBER: US 60/345,326  
; PRIOR FILING DATE: 2001-10-22  
; PRIOR APPLICATION NUMBER: US 60/359,196  
; PRIOR FILING DATE: 2002-02-20  
; PRIOR APPLICATION NUMBER: US 60/383,195  
; PRIOR FILING DATE: 2002-05-22  
; NUMBER OF SEQ ID NOS: 23  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 18  
; LENGTH: 19  
; TYPE: DNA  
; ORGANISM: Artificial  
; FEATURE:  
; OTHER INFORMATION: oligonucleotide  
US-10-831-267-18

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 82;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 270 GGCTTCTCCGAGGCACCC 288  
|||:|||||:|||||:|||||  
Db 1 GGCTTCTCCGAGGCACCC 19

## RESULT 76

US-10-831-267-19/c  
; Sequence 19, Application US/10831267  
; Publication No. US20050009177A1  
; GENERAL INFORMATION:  
; APPLICANT: Rowley, Peter T.  
; TITLE OF INVENTION: TELOMERASE INTERFERENCE  
; FILE REFERENCE: A-71506-2/RFT/THR  
; CURRENT APPLICATION NUMBER: US/10/831.267  
; CURRENT FILING DATE: 2004-04-22  
; PRIOR APPLICATION NUMBER: PCT/US 02/33146

; PRIOR FILING DATE: 2002-10-16  
; PRIOR APPLICATION NUMBER: US 60/345,326  
; PRIOR FILING DATE: 2001-10-22  
; PRIOR APPLICATION NUMBER: US 60/359,196  
; PRIOR FILING DATE: 2002-02-20  
; PRIOR APPLICATION NUMBER: US 60/383,195  
; PRIOR FILING DATE: 2002-05-22  
; NUMBER OF SEQ ID NOS: 23  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 19  
; LENGTH: 19  
; TYPE: DNA  
; ORGANISM: Artificial  
; FEATURE:  
; OTHER INFORMATION: oligonucleotide  
US-10-831-267-19

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 82;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 270 GGCTTCTCGGAGGACCC 288  
|||||  
Db 19 GGCTTCTCGGAGGACCC 1

RESULT 77  
US-10-714-195-343  
; Sequence 343, Application US/10714195  
; Publication No. US20050019785A1  
; GENERAL INFORMATION:  
; APPLICANT: Baker, Joffre  
; APPLICANT: Cronin, Maureen  
; APPLICANT: Shak, Steve  
; APPLICANT: Baselga, Jose  
; TITLE OF INVENTION: GENE EXPRESSION PROFILING OF EGFR  
; TITLE OF INVENTION: POSITIVE CANCER  
; FILE REFERENCE: 39740-0005  
; CURRENT APPLICATION NUMBER: US/10714,195  
; CURRENT FILING DATE: 2003-11-14  
; PRIOR APPLICATION NUMBER: 60/427090  
; PRIOR FILING DATE: 2003-11-15  
; NUMBER OF SEQ ID NOS: 372  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 343  
; LENGTH: 19  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: primer  
US-10-714-195-343

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 82;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 371 AAGAGGAACGGAGCGACTC 389  
|||||  
Db 1 AAGAGGAACGGAGCGAGTC 19

RESULT 78  
US-10-714-195-344/c  
; Sequence 344, Application US/10714195  
; Publication No. US20050019785A1  
; GENERAL INFORMATION:  
; APPLICANT: Baker, Joffre  
; APPLICANT: Cronin, Maureen  
; APPLICANT: Shak, Steve  
; APPLICANT: Baselga, Jose  
; TITLE OF INVENTION: GENE EXPRESSION PROFILING OF EGFR  
; TITLE OF INVENTION: POSITIVE CANCER  
; FILE REFERENCE: 39740-0005

; CURRENT APPLICATION NUMBER: US/10714,195  
; CURRENT FILING DATE: 2003-11-14  
; PRIOR APPLICATION NUMBER: 60/427090  
; PRIOR FILING DATE: 2003-11-15  
; NUMBER OF SEQ ID NOS: 372  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 344  
; LENGTH: 19  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: primer  
US-10-714-195-344

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 82;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 431 CAGGACTCGGCTCACACAT 449  
|||||  
Db 19 CAGGACTCGGCTCACACAT 1

RESULT 79  
US-10-923-330-7  
; Sequence 7, Application US/10923330  
; Publication No. US20050153916A1  
; GENERAL INFORMATION:  
; APPLICANT: Sirna Therapeutics, Inc.  
; APPLICANT: McSwiggen, James  
; APPLICANT: Beigelman, Leonid  
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siRNA)  
; FILE REFERENCE: 400/209 (WEHB02-708-C)  
; CURRENT APPLICATION NUMBER: US/10923,330  
; CURRENT FILING DATE: 2004-08-20  
; PRIOR APPLICATION NUMBER: PCT/US03/04088  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 60/396,600  
; PRIOR FILING DATE: 2002-07-17  
; PRIOR APPLICATION NUMBER: PCT/US04/16390  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 10/826,966  
; PRIOR FILING DATE: 2004-04-16  
; PRIOR APPLICATION NUMBER: US 10/757,803  
; PRIOR FILING DATE: 2004-01-14  
; PRIOR APPLICATION NUMBER: US 10/720,448  
; PRIOR FILING DATE: 2003-11-24  
; PRIOR APPLICATION NUMBER: US 10/693,059  
; PRIOR FILING DATE: 2003-11-23  
; PRIOR APPLICATION NUMBER: US 10/444,853  
; PRIOR FILING DATE: 2003-05-23  
; PRIOR APPLICATION NUMBER: PCT/US03/05346  
; PRIOR FILING DATE: 2003-02-20  
; PRIOR APPLICATION NUMBER: PCT/US03/05028  
; PRIOR FILING DATE: 2003-02-20  
; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 768  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 7  
; LENGTH: 19  
; TYPE: RNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siRNA sense re  
US-10-923-330-7

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 78.9%; Pred. No. 82;  
Matches 15; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY 14 TGGGCGCTGGGAGGGTGGT 32  
:|||||:|||||:|||||:|||||:

Db 1 UGGCCUGGAGGGGUGGU 19

RESULT 80

US-10-923-330-8

Sequence 8, Application US/10923330

Publication No. US20050153916A1

GENERAL INFORMATION:

APPLICANT: Sirna Therapeutics, Inc.

APPLICANT: Beigelman, Leonid

TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene

FILE REFERENCE: 400/209 (MBHB02-708-C)

CURRENT APPLICATION NUMBER: US/10/923,330

CURRENT FILING DATE: 2004-08-20

PRIOR APPLICATION NUMBER: PCT/US03/04088

PRIOR FILING DATE: 2004-05-24

PRIOR APPLICATION NUMBER: US 60/396,600

PRIOR FILING DATE: 2002-07-17

PRIOR APPLICATION NUMBER: PCT/US04/16390

PRIOR FILING DATE: 2004-05-24

PRIOR APPLICATION NUMBER: US 10/826,966

PRIOR FILING DATE: 2004-04-16

PRIOR APPLICATION NUMBER: US 10/720,448

PRIOR FILING DATE: 2003-11-24

PRIOR APPLICATION NUMBER: US 10/693,059

PRIOR FILING DATE: 2003-05-23

PRIOR APPLICATION NUMBER: PCT/US03/05346

PRIOR FILING DATE: 2003-02-20

Remaining Prior Application data removed - See File Wrapper or PALM.

NUMBER OF SEQ ID NOS: 768

SOFTWARE: PatentIn version 3.3

SEQ ID NO 8

LENGTH: 19

TYPE: RNA

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense x

US-10-923-330-8

Query Match 4.2%; Score 19; DB 1; Length 19;

Best Local Similarity 52.6%; Pred. No. 82;

Matches 10; Conservative 9; Mismatches 0; Indels 0; Gaps 0;

Qy 32 TGGCCATTTTGTCTAAC 50

Db 1 UGGCAUUUUUGUCUAC 19

RESULT 81

US-10-923-330-9

Sequence 9, Application US/10923330

Publication No. US20050153916A1

GENERAL INFORMATION:

APPLICANT: Sirna Therapeutics, Inc.

APPLICANT: Beigelman, Leonid

TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene

FILE REFERENCE: 400/209 (MBHB02-708-C)

CURRENT APPLICATION NUMBER: US/10/923,330

CURRENT FILING DATE: 2004-08-20

PRIOR APPLICATION NUMBER: PCT/US03/04088

PRIOR FILING DATE: 2004-05-24

PRIOR APPLICATION NUMBER: US 60/396,600

PRIOR FILING DATE: 2002-07-17

PRIOR APPLICATION NUMBER: PCT/US04/16390

PRIOR FILING DATE: 2004-05-24

PRIOR APPLICATION NUMBER: US 10/826,966

PRIOR FILING DATE: 2004-04-16

PRIOR APPLICATION NUMBER: US 10/757,803

PRIOR FILING DATE: 2004-01-14

PRIOR APPLICATION NUMBER: US 10/720,448

PRIOR FILING DATE: 2003-11-24

PRIOR APPLICATION NUMBER: US 10/693,059

PRIOR FILING DATE: 2003-11-23

PRIOR APPLICATION NUMBER: US 10/444,853

PRIOR FILING DATE: 2003-05-23

PRIOR APPLICATION NUMBER: PCT/US03/05346

PRIOR FILING DATE: 2003-02-20

PRIOR APPLICATION NUMBER: PCT/US03/05028

PRIOR FILING DATE: 2003-02-20

Remaining Prior Application data removed - See File Wrapper or PALM.

NUMBER OF SEQ ID NOS: 768

SOFTWARE: PatentIn version 3.3

SEQ ID NO 9

LENGTH: 19

TYPE: RNA

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense x

US-10-923-330-9

Query Match 4.2%; Score 19; DB 1; Length 19;

Best Local Similarity 84.2%; Pred. No. 82;

Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 50 CCTAACTGAGAAGGGCGT 68

Db 1 CCCUACUGAGAAGGGCGU 19

RESULT 82

US-10-923-330-10

Sequence 10, Application US/10923330

Publication No. US20050153916A1

GENERAL INFORMATION:

APPLICANT: Sirna Therapeutics, Inc.

APPLICANT: Beigelman, Leonid

TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene

FILE REFERENCE: 400/209 (MBHB02-708-C)

CURRENT APPLICATION NUMBER: US/10/923,330

CURRENT FILING DATE: 2004-08-20

PRIOR APPLICATION NUMBER: PCT/US03/04088

PRIOR FILING DATE: 2004-05-24

PRIOR APPLICATION NUMBER: US 60/396,600

PRIOR FILING DATE: 2002-07-17

PRIOR APPLICATION NUMBER: PCT/US04/16390

PRIOR FILING DATE: 2004-05-24

PRIOR APPLICATION NUMBER: US 10/826,966

PRIOR FILING DATE: 2004-04-16

PRIOR APPLICATION NUMBER: US 10/757,803

PRIOR FILING DATE: 2004-01-14

PRIOR APPLICATION NUMBER: US 10/720,448

PRIOR FILING DATE: 2003-11-24

PRIOR APPLICATION NUMBER: US 10/693,059

PRIOR FILING DATE: 2003-11-23

PRIOR APPLICATION NUMBER: US 10/444,853

PRIOR FILING DATE: 2003-05-23

PRIOR APPLICATION NUMBER: PCT/US03/05346

PRIOR FILING DATE: 2003-02-20

PRIOR APPLICATION NUMBER: PCT/US03/05028

PRIOR FILING DATE: 2003-02-20

Remaining Prior Application data removed - See File Wrapper or PALM.

NUMBER OF SEQ ID NOS: 768

SOFTWARE: PatentIn version 3.3

SEQ ID NO 10

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; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-923-330-10

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 63.2%; Pred. No. 82;
Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

QY 68 TAGGCGCGCTGCTTTTGCT 86
Db 1 UAGGCGCGCGCUGCUUUGCU 19

RESULT 83
US-10-923-330-11
; Sequence 11, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 11
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-923-330-11

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 63.2%; Pred. No. 82;
Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

QY 86 TCCCGCGCGCTGCTTTTTC 104
Db 1 UCCCGCGCGCUGUUUUC 19

RESULT 84
US-10-923-330-12
; Sequence 12, Application US/10923330
; Publication No. US20050153916A1
```

```
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 12
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-923-330-12

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 73.7%; Pred. No. 82;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

QY 104 CTCGCTGACTTTCAGCGGG 122
Db 1 CUCGCGACUUCAGCGGG 19

RESULT 85
US-10-923-330-13
; Sequence 13, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
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; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 13
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-923-330-13

Query Match      4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 82;
Matches 17; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 122 GCGGAAAAGCTCGGCTG 140
Db 1 GCGGAAAAGCCUCGCGCTG 19

RESULT 86
US-10-923-330-14
; Sequence 14, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 14
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-923-330-14

Query Match      4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 82;
Matches 17; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 122 GCGGAAAAGCTCGGCTG 140
Db 1 GCGGAAAAGCCUCGCGCTG 19

RESULT 86
US-10-923-330-14
; Sequence 14, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 14
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-923-330-14
```

```

Query Match      4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 73.7%; Pred. No. 82;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

Qy 140 GCGGCTTCCACCGTTTCAT 158
Db 1 GCGGCCUCCACCGUUCAU 19

RESULT 87
US-10-923-330-15
; Sequence 15, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 15
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-923-330-15

Query Match      4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 82;
Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 158 TTCTAGAGCAACACAAAAA 176
Db 1 UUCUAGAGCAACACAAAAA 19

RESULT 88
US-10-923-330-16
; Sequence 16, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; FILE REFERENCE: 400/209 (MBHB02-708-C)
```

; CURRENT APPLICATION NUMBER: US/10/923,330  
; CURRENT FILING DATE: 2004-08-20  
; PRIOR APPLICATION NUMBER: PCT/US03/04088  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 60/396,600  
; PRIOR FILING DATE: 2002-07-17  
; PRIOR APPLICATION NUMBER: PCT/US04/16390  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 10/826,966  
; PRIOR FILING DATE: 2004-04-16  
; PRIOR APPLICATION NUMBER: US 10/757,803  
; PRIOR FILING DATE: 2004-01-14  
; PRIOR APPLICATION NUMBER: US 10/720,448  
; PRIOR FILING DATE: 2003-11-24  
; PRIOR APPLICATION NUMBER: US 10/693,059  
; PRIOR FILING DATE: 2003-11-23  
; PRIOR APPLICATION NUMBER: US 10/444,853  
; PRIOR FILING DATE: 2003-05-23  
; PRIOR APPLICATION NUMBER: PCT/US03/05346  
; PRIOR FILING DATE: 2003-02-20  
; PRIOR APPLICATION NUMBER: PCT/US03/05028  
; PRIOR FILING DATE: 2003-02-20  
; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 768  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 16  
; LENGTH: 19  
; TYPE: RNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence  
US-10-923-330-16

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 73.7%; Pred. No. 82;  
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

Qy 176 ATGTCAGTGTGCGCCGT 194  
|:|||||:|||||:  
Db 1 AUGUCAGCUGCGCCCGU 19

RESULT 89  
US-10-923-330-17  
; Sequence 17, Application US/10923330  
; Publication No. US20050153916A1  
; GENERAL INFORMATION:  
; APPLICANT: Sirna Therapeutics, Inc.  
; APPLICANT: McSwiggen, James  
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
; FILE REFERENCE: 400/209 (MBHB02-708-C)  
; CURRENT APPLICATION NUMBER: US/10/923,330  
; CURRENT FILING DATE: 2004-08-20  
; PRIOR APPLICATION NUMBER: PCT/US03/04088  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 60/396,600  
; PRIOR FILING DATE: 2002-07-17  
; PRIOR APPLICATION NUMBER: PCT/US04/16390  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 10/826,966  
; PRIOR FILING DATE: 2004-04-16  
; PRIOR APPLICATION NUMBER: US 10/757,803  
; PRIOR FILING DATE: 2004-01-14  
; PRIOR APPLICATION NUMBER: US 10/720,448  
; PRIOR FILING DATE: 2003-11-24  
; PRIOR APPLICATION NUMBER: US 10/693,059  
; PRIOR FILING DATE: 2003-11-23  
; PRIOR APPLICATION NUMBER: US 10/444,853  
; PRIOR FILING DATE: 2003-05-23  
; PRIOR APPLICATION NUMBER: PCT/US03/05346  
; PRIOR FILING DATE: 2003-02-20

; PRIOR APPLICATION NUMBER: PCT/US03/05028  
; PRIOR FILING DATE: 2003-02-20  
; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 768  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 17  
; LENGTH: 19  
; TYPE: RNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence  
US-10-923-330-17

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 82;  
Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 194 TTGCGCCCTCCCGGGGACC 212  
:|||||:|||||:  
Db 1 UUGGCCCUCCCGGGGACC 19

RESULT 90  
US-10-923-330-18  
; Sequence 18, Application US/10923330  
; Publication No. US20050153916A1  
; GENERAL INFORMATION:  
; APPLICANT: Sirna Therapeutics, Inc.  
; APPLICANT: McSwiggen, James  
; APPLICANT: Beigelman, Leonid  
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
; FILE REFERENCE: 400/209 (MBHB02-708-C)  
; CURRENT APPLICATION NUMBER: US/10/923,330  
; CURRENT FILING DATE: 2004-08-20  
; PRIOR APPLICATION NUMBER: PCT/US03/04088  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 60/396,600  
; PRIOR FILING DATE: 2002-07-17  
; PRIOR APPLICATION NUMBER: PCT/US04/16390  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 10/826,966  
; PRIOR FILING DATE: 2004-04-16  
; PRIOR APPLICATION NUMBER: US 10/757,803  
; PRIOR FILING DATE: 2004-01-14  
; PRIOR APPLICATION NUMBER: US 10/720,448  
; PRIOR FILING DATE: 2003-11-24  
; PRIOR APPLICATION NUMBER: US 10/693,059  
; PRIOR FILING DATE: 2003-11-23  
; PRIOR APPLICATION NUMBER: US 10/444,853  
; PRIOR FILING DATE: 2003-05-23  
; PRIOR APPLICATION NUMBER: PCT/US03/05346  
; PRIOR FILING DATE: 2003-02-20  
; PRIOR APPLICATION NUMBER: PCT/US03/05028  
; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 768  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 18  
; LENGTH: 19  
; TYPE: RNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence  
US-10-923-330-18

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 73.7%; Pred. No. 82;  
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

Qy 176 ATGTCAGTGTGCGCCGT 194  
|:|||||:|||||:  
Db 1 AUGUCAGCUGCGCCCGU 19

RESULT 89  
US-10-923-330-17  
; Sequence 17, Application US/10923330  
; Publication No. US20050153916A1  
; GENERAL INFORMATION:  
; APPLICANT: Sirna Therapeutics, Inc.  
; APPLICANT: McSwiggen, James  
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
; FILE REFERENCE: 400/209 (MBHB02-708-C)  
; CURRENT APPLICATION NUMBER: US/10/923,330  
; CURRENT FILING DATE: 2004-08-20  
; PRIOR APPLICATION NUMBER: PCT/US03/04088  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 60/396,600  
; PRIOR FILING DATE: 2002-07-17  
; PRIOR APPLICATION NUMBER: PCT/US04/16390  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 10/826,966  
; PRIOR FILING DATE: 2004-04-16  
; PRIOR APPLICATION NUMBER: US 10/757,803  
; PRIOR FILING DATE: 2004-01-14  
; PRIOR APPLICATION NUMBER: US 10/720,448  
; PRIOR FILING DATE: 2003-11-24  
; PRIOR APPLICATION NUMBER: US 10/693,059  
; PRIOR FILING DATE: 2003-11-23  
; PRIOR APPLICATION NUMBER: US 10/444,853  
; PRIOR FILING DATE: 2003-05-23  
; PRIOR APPLICATION NUMBER: PCT/US03/05346  
; PRIOR FILING DATE: 2003-02-20

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 82;  
Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 212 CTGCGCGGGTCTGCGTCC 230  
|:|||||:|||||:  
Db 1 CUGCGCGGGGUGCGCCG 19

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 82;  
Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 212 CTGCGCGGGTCTGCGTCC 230  
|:|||||:|||||:  
Db 1 CUGCGCGGGGUGCGCCG 19

```
RESULT 91
US-10-923-330-19
; Sequence 19, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT FILING DATE: 2004-08-20
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 19
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense x
US-10-923-330-19
Query Match 4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 230 CCAGCCCCCGAACCCCGCC 248
Db 1 CCAGCCCCCGAACCCCGCC 19

RESULT 92
US-10-923-330-20
; Sequence 20, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT FILING DATE: 2004-08-20
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 19
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense x
US-10-923-330-19
Query Match 4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 230 CCAGCCCCCGAACCCCGCC 248
Db 1 CCAGCCCCCGAACCCCGCC 19

RESULT 93
US-10-923-330-21
; Sequence 21, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT FILING DATE: 2004-08-20
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 21
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense x
US-10-923-330-20
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```
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 20
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense x
US-10-923-330-20
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```
Query Match 4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 82;
Matches 17; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
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Qy 248 CTGAGGCGCGCGTCGCCC 266
Db 1 CUGAGGCGCGCGGCGGCC 19
```

```
RESULT 93
US-10-923-330-21
; Sequence 21, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT FILING DATE: 2004-08-20
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 21
; LENGTH: 19
```

```
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-923-330-21

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 82;
Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY      266 CCGGGGCTTCTCCGAGGC 284
Db       1 CCGGGGCUUCUCCGAGGC 19

RESULT 94
US-10-923-330-22
; Sequence 22, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 22
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-923-330-23

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 82;
Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      284 CACCCACTGCCACCGGAA 302
Db       1 CACCCACUGCCACCGGAA 19

RESULT 95
US-10-923-330-23
; Sequence 23, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
```

```
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 23
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-923-330-23

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 73.7%; Pred. No. 82;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

QY      302 AGAGTTGGGCTCTGTTCAGC 320
Db       1 AGAGUUGGGCUCUGCAGC 19

RESULT 96
US-10-923-330-24
; Sequence 24, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
```

;; PRIOR APPLICATION NUMBER: US 10/693,059  
;; PRIOR FILING DATE: 2003-11-23  
;; PRIOR APPLICATION NUMBER: US 10/444,853  
;; PRIOR FILING DATE: 2003-05-23  
;; PRIOR APPLICATION NUMBER: PCT/US03/05346  
;; PRIOR FILING DATE: 2003-02-20  
;; PRIOR APPLICATION NUMBER: PCT/US03/05028  
;; PRIOR FILING DATE: 2003-02-20  
;; Remaining Prior Application data removed - See File Wrapper or PALM.  
;; NUMBER OF SEQ ID NOS: 768  
;; SOFTWARE: PatentIn version 3.3  
;; SEQ ID NO 24  
;; LENGTH: 19  
;; TYPE: RNA  
;; ORGANISM: Artificial Sequence  
;; FEATURE:  
;; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense x  
US-10-923-330-24

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 82;  
Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 320 CCGCGGGTCTCTCGGGGCG 338  
Db 1 CCGCGGGGUCUCUGGGGCG 19

RESULT 97  
US-10-923-330-25  
;; Sequence 25, Application US/10923330  
;; Publication No. US20050153916A1  
;; GENERAL INFORMATION:  
;; APPLICANT: McSwiggen, James  
;; APPLICANT: Beigelman, Leonid  
;; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
;; FILE REFERENCE: 400/209 (MBHB02-708-C)  
;; CURRENT APPLICATION NUMBER: US/10/923,330  
;; CURRENT FILING DATE: 2004-08-20  
;; PRIOR APPLICATION NUMBER: PCT/US03/04088  
;; PRIOR FILING DATE: 2004-05-24  
;; PRIOR APPLICATION NUMBER: US 60/396,600  
;; PRIOR FILING DATE: 2002-07-17  
;; PRIOR APPLICATION NUMBER: PCT/US04/16390  
;; PRIOR FILING DATE: 2004-05-24  
;; PRIOR APPLICATION NUMBER: US 10/826,966  
;; PRIOR FILING DATE: 2004-04-16  
;; PRIOR APPLICATION NUMBER: US 10/757,803  
;; PRIOR FILING DATE: 2004-01-14  
;; PRIOR APPLICATION NUMBER: US 10/720,448  
;; PRIOR FILING DATE: 2003-11-24  
;; PRIOR APPLICATION NUMBER: US 10/693,059  
;; PRIOR FILING DATE: 2003-11-23  
;; PRIOR APPLICATION NUMBER: US 10/444,853  
;; PRIOR FILING DATE: 2003-05-23  
;; PRIOR APPLICATION NUMBER: PCT/US03/05346  
;; PRIOR FILING DATE: 2003-02-20  
;; PRIOR APPLICATION NUMBER: PCT/US03/05028  
;; PRIOR FILING DATE: 2003-02-20  
;; Remaining Prior Application data removed - See File Wrapper or PALM.  
;; NUMBER OF SEQ ID NOS: 768  
;; SOFTWARE: PatentIn version 3.3  
;; SEQ ID NO 25  
;; LENGTH: 19  
;; TYPE: RNA  
;; ORGANISM: Artificial Sequence  
;; FEATURE:  
;; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense x  
US-10-923-330-25

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 82;  
Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 320 CCGCGGGTCTCTCGGGGCG 338  
Db 1 CCGCGGGGUCUCUGGGGCG 19

Best Local Similarity 89.5%; Pred. No. 82;  
Matches 17; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 338 CGAGGCGGAGTTTCAGGCC 356  
Db 1 CGAGGCGGAGGUCAGGCC 19

RESULT 98  
US-10-923-330-26  
;; Sequence 26, Application US/10923330  
;; Publication No. US20050153916A1  
;; GENERAL INFORMATION:  
;; APPLICANT: McSwiggen, James  
;; APPLICANT: Beigelman, Leonid  
;; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
;; FILE REFERENCE: 400/209 (MBHB02-708-C)  
;; CURRENT APPLICATION NUMBER: US/10/923,330  
;; CURRENT FILING DATE: 2004-08-20  
;; PRIOR APPLICATION NUMBER: PCT/US03/04088  
;; PRIOR FILING DATE: 2004-05-24  
;; PRIOR APPLICATION NUMBER: US 60/396,600  
;; PRIOR FILING DATE: 2002-07-17  
;; PRIOR APPLICATION NUMBER: PCT/US04/16390  
;; PRIOR FILING DATE: 2004-05-24  
;; PRIOR APPLICATION NUMBER: US 10/826,966  
;; PRIOR FILING DATE: 2004-04-16  
;; PRIOR APPLICATION NUMBER: US 10/757,803  
;; PRIOR FILING DATE: 2004-01-14  
;; PRIOR APPLICATION NUMBER: US 10/720,448  
;; PRIOR FILING DATE: 2003-11-24  
;; PRIOR APPLICATION NUMBER: US 10/693,059  
;; PRIOR FILING DATE: 2003-11-23  
;; PRIOR APPLICATION NUMBER: US 10/444,853  
;; PRIOR FILING DATE: 2003-05-23  
;; PRIOR APPLICATION NUMBER: PCT/US03/05346  
;; PRIOR FILING DATE: 2003-02-20  
;; PRIOR APPLICATION NUMBER: PCT/US03/05028  
;; PRIOR FILING DATE: 2003-02-20  
;; Remaining Prior Application data removed - See File Wrapper or PALM.  
;; NUMBER OF SEQ ID NOS: 768  
;; SOFTWARE: PatentIn version 3.3  
;; SEQ ID NO 26  
;; LENGTH: 19  
;; TYPE: RNA  
;; ORGANISM: Artificial Sequence  
;; FEATURE:  
;; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense x  
US-10-923-330-26

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 84.2%; Pred. No. 82;  
Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 356 CTTTCAGGCGCGAGGAAGA 374  
Db 1 CUUUCAGGCGCGAGGAAGA 19

RESULT 99  
US-10-923-330-27  
;; Sequence 27, Application US/10923330  
;; Publication No. US20050153916A1  
;; GENERAL INFORMATION:  
;; APPLICANT: McSwiggen, James  
;; APPLICANT: Beigelman, Leonid  
;; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
;; FILE REFERENCE: 400/209 (MBHB02-708-C)  
;; CURRENT APPLICATION NUMBER: US/10/923,330

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; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 27
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-923-330-27

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 82;
Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      374  AGGAACGGAGCGAGTCCTCCC 392
Db      1      AGGAACGGAGCGAGUCCCC 19

RESULT 100
US-10-923-330-28
; Sequence 28, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 29
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-923-330-29
```

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; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 28
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-923-330-28

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 82;
Matches 17; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY      392  CGCGCGCGCGCGGATTCCTCCC 410
Db      1      CGCGCGCGCGCGGAUCCCC 19

RESULT 101
US-10-923-330-29
; Sequence 29, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 29
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-923-330-29

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 78.9%; Pred. No. 82;
Matches 15; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

QY      410  CTGAGCTGTGGGACGTGCA 428
Db      1      CUGAGCUGGCGGACGUGCA 19
```

```
RESULT 102
US-10-923-330-30
; Sequence 30, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siNA)
; FILE REFERENCE: 400/209 (MHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 30
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-923-330-30

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 82;
Matches 17; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy      428 ACCCAGGACTCGGCTCACA 446
      |||||:||||:||||:
Db      1 ACCCAGGACUGGCUCACACA 19

RESULT 103
US-10-923-330-31
; Sequence 31, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
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; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 31
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA sense r
US-10-923-330-31

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 82;
Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy      431 CAGGACTCGGCTCACACAT 449
      |||||:||||:||||:
Db      1 CAGGACUGGCUCACACAU 19

RESULT 104
US-10-923-330-38/c
; Sequence 38, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 38
; LENGTH: 19
; TYPE: RNA
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; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-38

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Gaps 0;

QY 14 TGGGCTCGGAGGGTGGT 32
    |||||
Db 19 TGGGCTCGGAGGGTGGT 1

RESULT 105
US-10-923-330-39/c
; Sequence 39, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MHB02-708-C)
; CURRENT APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 40
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-40

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 50 CCTAACTGAGAAGGGCGT 68
    |||||
Db 19 CCTAACTGAGAAGGGCGT 1

RESULT 107
US-10-923-330-41/c
; Sequence 41, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059

; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-39

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 32 TGGCCATTTTCTCTAAC 50
    |||||
Db 19 TGGCCATTTTCTCTAAC 1

RESULT 106
US-10-923-330-40/c
; Sequence 40, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
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; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 41
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-41

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 68 TAGCGCGGCTGCTTTTGT 86
Db 19 TAGCGCGGCTGCTTTTGT 1

RESULT 108
US-10-923-330-42/c
; Sequence 42, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 43
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-43

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 104 CTCGCTGACTTTCAGCGGG 122
Db 19 CTCGCTGACTTTCAGCGGG 1

RESULT 110
US-10-923-330-44/c
; Sequence 44, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
```

```
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 86 TCCCGCGCGCTGCTTTTC 104
Db 19 TCCCGCGCGCTGCTTTTC 1

RESULT 109
US-10-923-330-43/c
; Sequence 43, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 43
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-43

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 104 CTCGCTGACTTTCAGCGGG 122
Db 19 CTCGCTGACTTTCAGCGGG 1

RESULT 110
US-10-923-330-44/c
; Sequence 44, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
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/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 10/826,966
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-11-23
/ PRIOR APPLICATION NUMBER: US 10/444,853
/ PRIOR FILING DATE: 2003-05-23
/ PRIOR APPLICATION NUMBER: PCT/US03/05346
/ PRIOR FILING DATE: 2003-02-20
/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ PRIOR FILING DATE: 2003-02-20
```

Remaining Prior Application data removed - See File Wrapper or PALM.

NUMBER OF SEQ ID NOS: 768

SOFTWARE: PatentIn version 3.3

SEQ ID NO 44

LENGTH: 19

TYPE: RNA

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region

US-10-923-330-44

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 82;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 122 GCGGAAAAGCCTCGCCTG 140

Db 19 GCGGAAAAGCCTCGCCTG 1

RESULT 111

US-10-923-330-45/c

Sequence 45, Application US/10923330

Publication No. US20050153916A1

GENERAL INFORMATION:

APPLICANT: Sirna Therapeutics, Inc.

APPLICANT: McSwiggen, James

APPLICANT: Beigelman, Leonid

TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene

FILE REFERENCE: 400/209 (WBHB02-708-C)

CURRENT APPLICATION NUMBER: US/10/923,330

CURRENT FILING DATE: 2004-08-20

PRIOR APPLICATION NUMBER: PCT/US03/04088

PRIOR FILING DATE: 2004-05-24

PRIOR APPLICATION NUMBER: US 60/396,600

PRIOR FILING DATE: 2002-07-17

PRIOR APPLICATION NUMBER: PCT/US04/16390

PRIOR FILING DATE: 2004-05-24

PRIOR APPLICATION NUMBER: US 10/826,966

PRIOR FILING DATE: 2004-04-16

PRIOR APPLICATION NUMBER: US 10/757,803

PRIOR FILING DATE: 2004-01-14

PRIOR APPLICATION NUMBER: US 10/720,448

PRIOR FILING DATE: 2003-11-24

PRIOR APPLICATION NUMBER: US 10/693,059

PRIOR FILING DATE: 2003-11-23

PRIOR APPLICATION NUMBER: US 10/444,853

PRIOR FILING DATE: 2003-05-23

PRIOR APPLICATION NUMBER: PCT/US03/05346

PRIOR FILING DATE: 2003-02-20

PRIOR APPLICATION NUMBER: PCT/US03/05028

PRIOR FILING DATE: 2003-02-20

Remaining Prior Application data removed - See File Wrapper or PALM.

NUMBER OF SEQ ID NOS: 768

SOFTWARE: PatentIn version 3.3

SEQ ID NO 45

LENGTH: 19

TYPE: RNA

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region

US-10-923-330-45

Query Match 4.2%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 82;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 140 GCGGCTTCCACGTTTCAT 158

Db 19 GCGGCTTCCACGTTTCAT 1

RESULT 112

US-10-923-330-46/c

Sequence 46, Application US/10923330

Publication No. US20050153916A1

GENERAL INFORMATION:

APPLICANT: Sirna Therapeutics, Inc.

APPLICANT: McSwiggen, James

APPLICANT: Beigelman, Leonid

TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene

FILE REFERENCE: 400/209 (WBHB02-708-C)

CURRENT APPLICATION NUMBER: US/10/923,330

CURRENT FILING DATE: 2004-08-20

PRIOR APPLICATION NUMBER: PCT/US03/04088

PRIOR FILING DATE: 2004-05-24

PRIOR APPLICATION NUMBER: US 60/396,600

PRIOR FILING DATE: 2002-07-17

PRIOR APPLICATION NUMBER: PCT/US04/16390

PRIOR FILING DATE: 2004-05-24

PRIOR APPLICATION NUMBER: US 10/826,966

PRIOR FILING DATE: 2004-04-16

PRIOR APPLICATION NUMBER: US 10/757,803

PRIOR FILING DATE: 2004-01-14

PRIOR APPLICATION NUMBER: US 10/720,448

PRIOR FILING DATE: 2003-11-24

PRIOR APPLICATION NUMBER: US 10/693,059

PRIOR FILING DATE: 2003-11-23

PRIOR APPLICATION NUMBER: US 10/444,853

PRIOR FILING DATE: 2003-05-23

PRIOR APPLICATION NUMBER: PCT/US03/05346

PRIOR FILING DATE: 2003-02-20

PRIOR APPLICATION NUMBER: PCT/US03/05028

PRIOR FILING DATE: 2003-02-20

Remaining Prior Application data removed - See File Wrapper or PALM.

NUMBER OF SEQ ID NOS: 768

SOFTWARE: PatentIn version 3.3

SEQ ID NO 46

LENGTH: 19

TYPE: RNA

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region

US-10-923-330-46

Query Match 4.2%; Score 19; DB 1; Length 19;

Best Local Similarity 100.0%; Pred. No. 82;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 158 TTCTAGAGCAACAAAAA 176

Db 19 TTCTAGAGCAACAAAAA 1

```
RESULT 113
US-10-923-330-47/c
; Sequence 47, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siRNA)
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siRNA)
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 47
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siRNA antisense region
US-10-923-330-47

Query Match 4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 176 ATGTCAGCTGCTGCCCGT 194
|||||
Db 19 ATGTCAGCTGCTGCCCGT 1

RESULT 114
US-10-923-330-48/c
; Sequence 48, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 48
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siRNA antisense region
US-10-923-330-48

Query Match 4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 176 ATGTCAGCTGCTGCCCGT 194
|||||
Db 19 ATGTCAGCTGCTGCCCGT 1

RESULT 115
US-10-923-330-49/c
; Sequence 49, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siRNA)
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siRNA)
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 49
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siRNA antisense region
US-10-923-330-49

Query Match 4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 194 TTGCGCCCTCCCGGGACC 212
|||||
Db 19 TTGCGCCCTCCCGGGACC 1
```

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/
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
/ US-10-923-330-49

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 212 CTGCGCGCGGTGCGCTGCC 230
Db 19 CTGCGCGCGGTGCGCTGCC 1

RESULT 116
US-10-923-330-50/c
/ Sequence 50, Application US/10923330
/ Publication No. US20050153916A1
/ GENERAL INFORMATION:
/ APPLICANT: McSwiggen, James
/ APPLICANT: Beigelman, Leonid
/ TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
/ FILE REFERENCE: 400/209 (MBH02-708-C)
/ CURRENT APPLICATION NUMBER: US/10/923,330
/ CURRENT FILING DATE: 2004-08-20
/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 10/826,966
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-11-23
/ PRIOR APPLICATION NUMBER: US 10/444,853
/ PRIOR FILING DATE: 2003-05-23
/ PRIOR APPLICATION NUMBER: PCT/US03/05346
/ PRIOR FILING DATE: 2003-02-20
/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ PRIOR FILING DATE: 2003-02-20
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 50
/ LENGTH: 19
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
/ US-10-923-330-50

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 230 CCAGCCCCCGAACCCGCC 248
Db 19 CCAGCCCCCGAACCCGCC 1

RESULT 117
US-10-923-330-51/c
/ Sequence 51, Application US/10923330
/ Publication No. US20050153916A1
/ GENERAL INFORMATION:
/ APPLICANT: McSwiggen, James
/ APPLICANT: Beigelman, Leonid
/ TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
/ FILE REFERENCE: 400/209 (MBH02-708-C)
/ CURRENT APPLICATION NUMBER: US/10/923,330
/ CURRENT FILING DATE: 2004-08-20
/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 10/826,966
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-11-23
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 50
/ LENGTH: 19
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
/ US-10-923-330-50

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 230 CCAGCCCCCGAACCCGCC 248
Db 19 CCAGCCCCCGAACCCGCC 1

RESULT 118
US-10-923-330-52/c
/ Sequence 52, Application US/10923330
/ Publication No. US20050153916A1
/ GENERAL INFORMATION:
/ APPLICANT: McSwiggen, James
/ APPLICANT: Beigelman, Leonid
/ TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
/ FILE REFERENCE: 400/209 (MBH02-708-C)
/ CURRENT APPLICATION NUMBER: US/10/923,330
/ CURRENT FILING DATE: 2004-08-20
/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 10/826,966
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-11-23
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 51
/ LENGTH: 19
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
/ US-10-923-330-51

Query Match          4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 248 CTGAGGCGCGGTGCGGC 266
Db 19 CTGAGGCGCGGTGCGGC 1

RESULT 119
US-10-923-330-53/c
/ Sequence 53, Application US/10923330
/ Publication No. US20050153916A1
/ GENERAL INFORMATION:
/ APPLICANT: McSwiggen, James
/ APPLICANT: Beigelman, Leonid
/ TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
/ FILE REFERENCE: 400/209 (MBH02-708-C)
/ CURRENT APPLICATION NUMBER: US/10/923,330
/ CURRENT FILING DATE: 2004-08-20
/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 10/826,966
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-11-23
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 52
/ LENGTH: 19
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
/ US-10-923-330-52
```

; PRIOR APPLICATION NUMBER: US 10/444,853  
; PRIOR FILING DATE: 2003-05-23  
; PRIOR APPLICATION NUMBER: PCT/US03/05346  
; PRIOR FILING DATE: 2003-02-20  
; PRIOR APPLICATION NUMBER: PCT/US03/05028  
; PRIOR FILING DATE: 2003-02-20  
; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 768  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 52  
; LENGTH: 19  
; TYPE: RNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region  
US-10-923-330-52

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 82;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 266 CCGGGGCTTCTCCGAGGC 284  
Db 19 CCGGGGCTTCTCCGAGGC 1

RESULT 119  
US-10-923-330-53/c  
; Sequence 53, Application US/10923330  
; Publication No. US20050153916A1  
; GENERAL INFORMATION:  
; APPLICANT: Sirna Therapeutics, Inc.  
; APPLICANT: McSwiggen, James  
; APPLICANT: Beigelman, Leonid  
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
; FILE REFERENCE: 400/209 (MBHB02-708-C)  
; CURRENT FILING DATE: 2004-08-20  
; PRIOR APPLICATION NUMBER: PCT/US03/04088  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 60/396,600  
; PRIOR FILING DATE: 2002-07-17  
; PRIOR APPLICATION NUMBER: PCT/US04/16390  
; PRIOR FILING DATE: 2004-04-16  
; PRIOR APPLICATION NUMBER: US 10/757,803  
; PRIOR FILING DATE: 2004-01-14  
; PRIOR APPLICATION NUMBER: US 10/720,448  
; PRIOR FILING DATE: 2003-11-24  
; PRIOR APPLICATION NUMBER: US 10/693,059  
; PRIOR FILING DATE: 2003-11-23  
; PRIOR APPLICATION NUMBER: US 10/444,853  
; PRIOR FILING DATE: 2003-05-23  
; PRIOR APPLICATION NUMBER: PCT/US03/05346  
; PRIOR FILING DATE: 2003-02-20  
; PRIOR APPLICATION NUMBER: PCT/US03/05028  
; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 768  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 54  
; LENGTH: 19  
; TYPE: RNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region  
US-10-923-330-54

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 82;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 302 AGAGTTGGGCTCTGTCTCAGC 320  
Db 19 AGAGTTGGGCTCTGTCTCAGC 1

RESULT 121  
US-10-923-330-55/c  
; Sequence 55, Application US/10923330  
; Publication No. US20050153916A1  
; GENERAL INFORMATION:  
; APPLICANT: Sirna Therapeutics, Inc.  
; APPLICANT: McSwiggen, James  
; APPLICANT: Beigelman, Leonid  
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
; FILE REFERENCE: 400/209 (MBHB02-708-C)  
; CURRENT FILING DATE: 2004-08-20  
; PRIOR APPLICATION NUMBER: PCT/US03/05028  
; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 768  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 53  
; LENGTH: 19  
; TYPE: RNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region  
US-10-923-330-53

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 82;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 284 CACCCACTGCCACCGCAA 302  
Db 19 CACCCACTGCCACCGCAA 1

RESULT 120  
US-10-923-330-54/c  
; Sequence 54, Application US/10923330  
; Publication No. US20050153916A1  
; GENERAL INFORMATION:  
; APPLICANT: Sirna Therapeutics, Inc.  
; APPLICANT: McSwiggen, James  
; APPLICANT: Beigelman, Leonid  
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
; FILE REFERENCE: 400/209 (MBHB02-708-C)  
; CURRENT FILING DATE: 2004-08-20  
; PRIOR APPLICATION NUMBER: PCT/US03/04088  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 60/396,600  
; PRIOR FILING DATE: 2002-07-17  
; PRIOR APPLICATION NUMBER: PCT/US04/16390  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 10/826,966  
; PRIOR FILING DATE: 2004-04-16  
; PRIOR APPLICATION NUMBER: US 10/757,803  
; PRIOR FILING DATE: 2004-01-14  
; PRIOR APPLICATION NUMBER: US 10/720,448  
; PRIOR FILING DATE: 2003-11-24  
; PRIOR APPLICATION NUMBER: US 10/693,059  
; PRIOR FILING DATE: 2003-11-23  
; PRIOR APPLICATION NUMBER: US 10/444,853  
; PRIOR FILING DATE: 2003-05-23  
; PRIOR APPLICATION NUMBER: PCT/US03/05346  
; PRIOR FILING DATE: 2003-02-20  
; PRIOR APPLICATION NUMBER: PCT/US03/05028  
; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 768  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 54  
; LENGTH: 19  
; TYPE: RNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region  
US-10-923-330-54

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 82;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 302 AGAGTTGGGCTCTGTCTCAGC 320  
Db 19 AGAGTTGGGCTCTGTCTCAGC 1

RESULT 121  
US-10-923-330-55/c  
; Sequence 55, Application US/10923330  
; Publication No. US20050153916A1  
; GENERAL INFORMATION:  
; APPLICANT: Sirna Therapeutics, Inc.  
; APPLICANT: McSwiggen, James  
; APPLICANT: Beigelman, Leonid  
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
; FILE REFERENCE: 400/209 (MBHB02-708-C)  
; CURRENT FILING DATE: 2004-08-20  
; PRIOR APPLICATION NUMBER: PCT/US03/04088

; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 60/396,600  
; PRIOR FILING DATE: 2002-07-17  
; PRIOR APPLICATION NUMBER: PCT/US04/16390  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 10/826,966  
; PRIOR FILING DATE: 2004-04-16  
; PRIOR APPLICATION NUMBER: US 10/757,803  
; PRIOR FILING DATE: 2004-01-14  
; PRIOR APPLICATION NUMBER: US 10/720,448  
; PRIOR FILING DATE: 2003-11-24  
; PRIOR APPLICATION NUMBER: US 10/693,059  
; PRIOR FILING DATE: 2003-11-23  
; PRIOR APPLICATION NUMBER: US 10/444,853  
; PRIOR FILING DATE: 2003-05-23  
; PRIOR APPLICATION NUMBER: PCT/US03/05346  
; PRIOR FILING DATE: 2003-02-20  
; PRIOR APPLICATION NUMBER: PCT/US03/05028  
; PRIOR FILING DATE: 2003-02-20

; Remaining Prior Application data removed - See File Wrapper or PALM.

; NUMBER OF SEQ ID NOS: 768  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 55  
; LENGTH: 19  
; TYPE: RNA  
; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region

US-10-923-330-55

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 82;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 320 CCGCGGGTCTCTCGGGGCG 338  
DB 19 CCGCGGGTCTCTCGGGGCG 1

RESULT 122

US-10-923-330-56/c  
; Sequence 56, Application US/10923330  
; Publication No. US20050153916A1  
; GENERAL INFORMATION:  
; APPLICANT: Sirna Therapeutics, Inc.  
; APPLICANT: McSwiggen, James  
; APPLICANT: Beigelman, Leonid  
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
; FILE REFERENCE: 400/209 (MBH02-708-C)  
; CURRENT APPLICATION NUMBER: US/10/923,330  
; CURRENT FILING DATE: 2004-08-20  
; PRIOR APPLICATION NUMBER: PCT/US03/04088  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 60/396,600  
; PRIOR FILING DATE: 2002-07-17  
; PRIOR APPLICATION NUMBER: PCT/US04/16390  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 10/826,966  
; PRIOR FILING DATE: 2004-04-16  
; PRIOR APPLICATION NUMBER: US 10/757,803  
; PRIOR FILING DATE: 2004-01-14  
; PRIOR APPLICATION NUMBER: PCT/US03/05346  
; PRIOR FILING DATE: 2003-11-24  
; PRIOR APPLICATION NUMBER: PCT/US03/05028  
; PRIOR FILING DATE: 2003-02-20  
; Remaining Prior Application data removed - See File Wrapper or PALM.

; NUMBER OF SEQ ID NOS: 768  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 57  
; LENGTH: 19  
; TYPE: RNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region  
US-10-923-330-57

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 82;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 356 CTTTCAGGCGCGCAGGAAGA 374  
DB 19 CTTTCAGGCGCGCAGGAAGA 1

RESULT 124

; NUMBER OF SEQ ID NOS: 768  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 56  
; LENGTH: 19  
; TYPE: RNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region  
US-10-923-330-56

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 82;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 338 CGAGGCGGAGGTTTCAGGCC 356  
DB 19 CGAGGCGGAGGTTTCAGGCC 1

RESULT 123

US-10-923-330-57/c  
; Sequence 57, Application US/10923330  
; Publication No. US20050153916A1  
; GENERAL INFORMATION:  
; APPLICANT: Sirna Therapeutics, Inc.  
; APPLICANT: McSwiggen, James  
; APPLICANT: Beigelman, Leonid  
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
; FILE REFERENCE: 400/209 (MBH02-708-C)  
; CURRENT APPLICATION NUMBER: US/10/923,330  
; CURRENT FILING DATE: 2004-08-20  
; PRIOR APPLICATION NUMBER: PCT/US03/04088  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 60/396,600  
; PRIOR FILING DATE: 2002-07-17  
; PRIOR APPLICATION NUMBER: PCT/US04/16390  
; PRIOR FILING DATE: 2004-05-24  
; PRIOR APPLICATION NUMBER: US 10/826,966  
; PRIOR FILING DATE: 2004-04-16  
; PRIOR APPLICATION NUMBER: US 10/757,803  
; PRIOR FILING DATE: 2004-01-14  
; PRIOR APPLICATION NUMBER: PCT/US03/05346  
; PRIOR FILING DATE: 2003-11-24  
; PRIOR APPLICATION NUMBER: PCT/US03/05028  
; PRIOR FILING DATE: 2003-11-23  
; PRIOR APPLICATION NUMBER: US 10/444,853  
; PRIOR FILING DATE: 2003-05-23  
; PRIOR APPLICATION NUMBER: PCT/US03/05346  
; PRIOR FILING DATE: 2003-02-20  
; Remaining Prior Application data removed - See File Wrapper or PALM.

; NUMBER OF SEQ ID NOS: 768  
; SOFTWARE: PatentIn version 3.3  
; SEQ ID NO 57  
; LENGTH: 19  
; TYPE: RNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region  
US-10-923-330-57

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 82;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 356 CTTTCAGGCGCGCAGGAAGA 374  
DB 19 CTTTCAGGCGCGCAGGAAGA 1

```
US-10-923-330-59/c
; Sequence 58, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 58
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-58
Query Match 4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 374 AGGAACGGAGCGAGTCCCC 392
Db 19 AGGAACGGAGCGAGTCCCC 1
RESULT 125
US-10-923-330-59/c
; Sequence 59, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 59
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-58
Query Match 4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 374 AGGAACGGAGCGAGTCCCC 392
Db 19 AGGAACGGAGCGAGTCCCC 1
RESULT 125
US-10-923-330-59/c
; Sequence 58, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 58
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-58
Query Match 4.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 392 CGCGCGCGCGGATTTCCC 410
Db 19 CGCGCGCGCGGATTTCCC 1
RESULT 126
US-10-923-330-60/c
; Sequence 60, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 60
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-59
```

OTHER INFORMATION: Description of Artificial Sequence: sRNA antisense region  
US-10-923-330-60

Query Match 4.2%; Score 19; DB 1; Length 19;  
Best Local Similarity 100.0%; Pred. No. 82;  
Matches 19; Conservative 0; Mismatches 0; Gaps 0;

Qy 410 CTGAGCTGTGGGACGTGCA 428  
|||  
Db 19 CTGAGCTGTGGGACGTGCA 1

RESULT 127

US-10-923-330-61/C  
; Sequence 6A, Application US/10923330  
; Publication No. US20050153916A1  
; GENERAL INFORMATION:  
; APPLICANT: Sirna Therapeutics, Inc.  
; APPLICANT: McSwiggen, James  
; APPLICANT: Beigelman, Leonid  
; TITLE OF INVENTION: RNA Interference Mediated  
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siRNA)  
; TITLE OF INVENTION: Telomerase Gene

FILE REFERENCE: 400/209 (MBHB02-708-C)  
CURRENT APPLICATION NUMBER: US/10/923,330

; CURRENT FILING DATE: 2004-08-20  
 ; PRIOR APPLICATION NUMBER: PCT/US03/04088

; PRIOR FILING DATE: 2004-05-24  
 ; PRIOR APPLICATION NUMBER: US 60/396,600

; PRIOR FILING DATE: 2002-07-17  
 : PRIOR APPLICATION NUMBER: PCT/US04/16380

; PRIOR APPLICATION NUMBER: 101/0004/10330  
 ; PRIOR FILING DATE: 2004-05-24  
 ; PRIOR APPLICATION NUMBER: 110/0000 000

; PRIOR AFFILIATION NUMBER: US 10/826,966  
 ; PRIOR FILING DATE: 2004-04-16  
 ; PRIOR APPLICATION NUMBER: US 10/755,888

; PRIOR FILING DATE: 2004-01-14  
 ; PRIOR APPLICATION NUMBER: US 10/757,803

;; PRIOR APPLICATION NUMBER: US 10/720,448  
;; PRIOR FILING DATE: 2003-11-24

;; PRIOR APPLICATION NUMBER: US 10/693,059  
;; PRIOR FILING DATE: 2003-11-23

; PRIOR APPLICATION NUMBER: US 10/444,853  
 : PRIOR FILING DATE: 2003-05-23

; PRIOR APPLICATION NUMBER: PCT/US03/05346  
 ; PRIOR FILING DATE: 2003-02-20

;; PRIOR APPLICATION NUMBER: PCT/US03/05028  
: PRIOR FILING DATE: 2003-02-20

); Remaining Prior Application data removed - See File Wrapper or PALM.

NUMBER OF SEQ ID NOS: 768  
SOFTWARE: Patent In version 3.3

```

; SEQ ID NO 61
; LENGTH: 19

```

TYPE: RNA  
ORGANISM: *Anticarsia gemmatilis*

**ORGANISM:** ALICICIAL sequence  
**FEATURE:**  
OTHER INFORMATION: P-100

OTHER INFORMATION: Description  
US-10-923-330-61

Query Match	4.2%
-------------	------

Best Local Similarity 100.0%;  
Matches 19; Conservative

428 ACCCAGGACTCGGCTCACCA

19 ACCAGGACTCGGCTCACA

SECRET

RESULT 128  
19-10 933 330 00/2

Sequence 62, Application US/1092

PUBLICATION NO. US20050153916A1  
GENERAL INFORMATION:

APPLICANT: Sirna Therapeutics,  
APPLICANT: McSwiggen, James

APPLICANT: Beigelman, Leonid

```

; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siNA)
; FILE REFERENCE: 400/209 (WBHB02-70B-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 62
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-923-330-62

```

Query Match	4.2%;	Score 19;	DB 1;
Best Local Similarity	100.0%;	Pred. No. 82;	Length 19;
Matches 19;	Conservative 0;	Mismatches 0;	Indels 0;
Gaps 0;			

QY 431 CAGGACTCGGCTCACACAT 449  
Db 19 CAGGACTCGGCTCACACAT 1

RESULT 129

```

US-10-831-266-6
; Sequence 6, Application US/10831266
; Publication No. US2005000340A1
; GENERAL INFORMATION:
; APPLICANT: Rowley, Peter T.
; TITLE OF INVENTION: TELOMERASE INTERFERENCE
; FILE REFERENCE: A-71506-1/RPT/THR
; CURRENT APPLICATION NUMBER: US/10/831,266
; CURRENT FILING DATE: 2004-04-22
; PRIOR APPLICATION NUMBER: PCT/US 02/33065
; PRIOR FILING DATE: 2002-10-16
; PRIOR APPLICATION NUMBER: US 60/345,326
; PRIOR FILING DATE: 2001-10-22
; PRIOR APPLICATION NUMBER: US 60/359,196
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 60/383,195
; PRIOR FILING DATE: 2002-05-22
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 6
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: oligonucleotide
US-10-831-266-6

```

US-10-831-266-6



```
Query Match      4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 68.4%; Pred. No. 1e+02;
Matches 13; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGTCTAACCCCTAACTGAG 60
Db 1 UUGUCUAAACCCUAACTGAG 19

RESULT 130
US-10-831-266-7/c
; Sequence 7, Application US/10831266
; Publication No. US20050003404A1
; GENERAL INFORMATION:
; APPLICANT: Rowley, Peter T.
; TITLE OF INVENTION: TELOMERASE INTERFERENCE
; FILE REFERENCE: A-71506-1/RPT/THR
; CURRENT APPLICATION NUMBER: US/10/831,266
; CURRENT FILING DATE: 2004-04-22
; PRIOR APPLICATION NUMBER: PCT/US 02/33065
; PRIOR FILING DATE: 2002-10-16
; PRIOR FILING DATE: 2001-10-22
; PRIOR FILING DATE: 2001-10-22
; PRIOR FILING DATE: 2002-02-20
; PRIOR FILING DATE: 2002-05-22
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 7
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: oligonucleotide
US-10-831-266-7

Query Match      4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGTCTAACCCCTAACTGAG 60
Db 19 TTGTCTAACCCCTAACTGAG 1

RESULT 131
US-10-831-266-8
; Sequence 8, Application US/10831266
; Publication No. US20050003404A1
; GENERAL INFORMATION:
; APPLICANT: Rowley, Peter T.
; TITLE OF INVENTION: TELOMERASE INTERFERENCE
; FILE REFERENCE: A-71506-1/RPT/THR
; CURRENT APPLICATION NUMBER: US/10/831,266
; CURRENT FILING DATE: 2004-04-22
; PRIOR APPLICATION NUMBER: PCT/US 02/33065
; PRIOR FILING DATE: 2002-10-16
; PRIOR FILING DATE: 2001-10-22
; PRIOR FILING DATE: 2001-10-22
; PRIOR FILING DATE: 2002-02-20
; PRIOR FILING DATE: 2002-05-22
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 8
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: oligonucleotide
US-10-831-266-8

Query Match      4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 68.4%; Pred. No. 1e+02;
Matches 13; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGTCTAACCCCTAACTGAG 60
Db 1 UUGUCUAAACCCUAACTGAG 19

RESULT 132
US-10-831-266-9/c
; Sequence 9, Application US/10831266
; Publication No. US20050003404A1
; GENERAL INFORMATION:
; APPLICANT: Rowley, Peter T.
; TITLE OF INVENTION: TELOMERASE INTERFERENCE
; FILE REFERENCE: A-71506-1/RPT/THR
; CURRENT APPLICATION NUMBER: US/10/831,266
; CURRENT FILING DATE: 2004-04-22
; PRIOR APPLICATION NUMBER: PCT/US 02/33065
; PRIOR FILING DATE: 2002-10-16
; PRIOR FILING DATE: 2001-10-22
; PRIOR FILING DATE: 2001-10-22
; PRIOR FILING DATE: 2002-02-20
; PRIOR FILING DATE: 2002-05-22
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 9
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: oligonucleotide
US-10-831-266-9

Query Match      4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 270 GGCTTCTCCGGAGGCACCC 288
Db 19 GGCTTCTCCGGAGGCACCC 1

RESULT 133
US-10-831-267-6
; Sequence 6, Application US/10831267
; Publication No. US20050009177A1
; GENERAL INFORMATION:
; APPLICANT: Rowley, Peter T.
; TITLE OF INVENTION: TELOMERASE INTERFERENCE
; FILE REFERENCE: A-71506-2/RPT/THR
; CURRENT APPLICATION NUMBER: US/10/831,267
; CURRENT FILING DATE: 2004-04-22
; PRIOR APPLICATION NUMBER: PCT/US 02/33146
; PRIOR FILING DATE: 2002-10-16
; PRIOR FILING DATE: 2001-10-22
; PRIOR FILING DATE: 2001-10-22
; PRIOR FILING DATE: 2002-02-20
; PRIOR FILING DATE: 2002-05-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 6
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: oligonucleotide
US-10-831-267-6
```

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US-10-831-267-6
Query Match      4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 68.4%; Pred. No. 1e+02;
Matches 13; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGCTAACCCCTAACTGAG 60
Db 1 UUGUCUAAACCCUAAACUGAG 19

RESULT 134
US-10-831-267-7/c
; Sequence 7, Application US/10831267
; Publication No. US20050009177A1
; GENERAL INFORMATION:
; APPLICANT: Rowley, Peter T.
; TITLE OF INVENTION: TELOMERASE INTERFERENCE
; FILE REFERENCE: A-71506-2/RFT/THR
; CURRENT APPLICATION NUMBER: US/10/831,267
; CURRENT FILING DATE: 2004-04-22
; PRIOR APPLICATION NUMBER: PCT/US 02/33146
; PRIOR FILING DATE: 2002-10-16
; PRIOR APPLICATION NUMBER: US 60/345,326
; PRIOR FILING DATE: 2001-10-22
; PRIOR APPLICATION NUMBER: US 60/359,196
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 60/383,195
; PRIOR FILING DATE: 2002-05-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 7
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: oligonucleotide
US-10-831-267-7

Query Match      4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGCTAACCCCTAACTGAG 60
Db 19 TTGCTAACCCCTAACTGAG 1

RESULT 135
US-10-831-267-8
; Sequence 8, Application US/10831267
; Publication No. US20050009177A1
; GENERAL INFORMATION:
; APPLICANT: Rowley, Peter T.
; TITLE OF INVENTION: TELOMERASE INTERFERENCE
; FILE REFERENCE: A-71506-2/RFT/THR
; CURRENT APPLICATION NUMBER: US/10/831,267
; CURRENT FILING DATE: 2004-04-22
; PRIOR APPLICATION NUMBER: PCT/US 02/33146
; PRIOR FILING DATE: 2002-10-16
; PRIOR APPLICATION NUMBER: US 60/345,326
; PRIOR FILING DATE: 2001-10-22
; PRIOR APPLICATION NUMBER: US 60/359,196
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 60/383,195
; PRIOR FILING DATE: 2002-05-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 8
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: oligonucleotide
US-10-831-267-8

Query Match      4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGCTAACCCCTAACTGAG 60
Db 19 TTGCTAACCCCTAACTGAG 1

RESULT 136
US-10-831-267-9/c
; Sequence 9, Application US/10831267
; Publication No. US20050009177A1
; GENERAL INFORMATION:
; APPLICANT: Rowley, Peter T.
; TITLE OF INVENTION: TELOMERASE INTERFERENCE
; FILE REFERENCE: A-71506-2/RFT/THR
; CURRENT APPLICATION NUMBER: US/10/831,267
; CURRENT FILING DATE: 2004-04-22
; PRIOR APPLICATION NUMBER: PCT/US 02/33146
; PRIOR FILING DATE: 2002-10-16
; PRIOR APPLICATION NUMBER: US 60/345,326
; PRIOR FILING DATE: 2001-10-22
; PRIOR APPLICATION NUMBER: US 60/359,196
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 60/383,195
; PRIOR FILING DATE: 2002-05-22
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 9
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: oligonucleotide
US-10-831-267-9

Query Match      4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGCTAACCCCTAACTGAG 60
Db 19 TTGCTAACCCCTAACTGAG 1

RESULT 137
US-10-923-330-546
; Sequence 546, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sinna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene Expression Using Short Interfering RNA (siRNA)
; FILE REFERENCE: 400/209 (WBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448

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; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 546
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; NAME/KEY: misc_feature
; LOCATION: (20)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-546

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 63.2%; Pred. No. 1e+02;
Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTCATTCTAG 163
Db 1 CUUCCACCGUUAUUCUAG 19

RESULT 138
US-10-923-330-547
; Sequence 547, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siNA)
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 547
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; NAME/KEY: misc_feature
; LOCATION: (20)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-547

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 63.2%; Pred. No. 1e+02;
Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

QY 145 CTTCCACCGTTCATTCTAG 163
Db 1 CUUCCACCGUUAUUCUAG 19

RESULT 139
US-10-923-330-548
; Sequence 548, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siNA)
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 548
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; NAME/KEY: misc_feature
; LOCATION: (20)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-548

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 68.4%; Pred. No. 1e+02;
Matches 13; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

QY 147 TCCACCGTTCATTCTAGAG 165
Db 1 UCCACCGUUAUUCUAGAG 19
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; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-547

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 63.2%; Pred. No. 1e+02;
Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

QY 146 TTCACCGTTCATTCTAG 164
Db 1 UCCACCGUUAUUCUAGA 19

RESULT 139
US-10-923-330-548
; Sequence 548, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siNA)
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 548
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; NAME/KEY: misc_feature
; LOCATION: (20)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-548

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 68.4%; Pred. No. 1e+02;
Matches 13; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

QY 147 TCCACCGTTCATTCTAGAG 165
Db 1 UCCACCGUUAUUCUAGAG 19
```

```
RESULT 140
US-10-923-330-549
; Sequence 549, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 549
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siRNA sense region
; NAME/KEY: misc feature
; LOCATION: (20)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-549

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred.No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

QY 148 CCACCGTTCATTCTAGAGC 166
|||||:|||||
Db 1 CCACCGUUAUCUAGAGC 19

RESULT 141
US-10-923-330-550
; Sequence 550, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 549
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siRNA sense region
; NAME/KEY: misc feature
; LOCATION: (20)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-549

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred.No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

QY 148 CCACCGTTCATTCTAGAGC 166
|||||:|||||
Db 1 CCACCGUUAUCUAGAGC 19

RESULT 142
US-10-923-330-551
; Sequence 551, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 550
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siRNA sense region
; NAME/KEY: misc feature
; LOCATION: (20)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-550

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred.No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

QY 149 CACCGTTCATTCTAGAGCA 167
|||||:|||||
Db 1 CACCGUUAUCUAGAGCA 19

RESULT 143
US-10-923-330-552
; Sequence 552, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 552
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siRNA sense region
; NAME/KEY: misc feature
; LOCATION: (20)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-552
```



```
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siRNA)
; FILE REFERENCE: 400/209 (MHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 555
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc_feature
; LOCATION: (20)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-555
```

```
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 146 TTCACCGTTCATTCTAGA 164
||| ||||| ||||| ||||| |||||
Db 19 TTCACCGTTCATTCTAGA 1

RESULT 146
US-10-923-330-556/c
; Sequence 556, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siRNA)
; FILE REFERENCE: 400/209 (MHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 555
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc_feature
; LOCATION: (20)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-555
```

```
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 556
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc_feature
; LOCATION: (20)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-556

Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 147 TCCACCGTTCATTCTAGAG 165
||| ||||| ||||| ||||| |||||
Db 19 TCCACCGTTCATTCTAGAG 1

RESULT 147
US-10-923-330-557/c
; Sequence 557, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siNA)
; FILE REFERENCE: 400/209 (MHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 557
; LENGTH: 21
```

```
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc_feature
; LOCATION: (20)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-557

Query Match          4.2%  Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 148 CCACCGTTCATTCTAGAGC 166
      |||||||
Db 19 CCACCGTTCATTCTAGAGC 1

RESULT 148
US-10-923-330-558/c
; Sequence 558, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923.330
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 558
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc_feature
; LOCATION: (20)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-558

Query Match          4.2%  Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 149 CACCGTTCATTCTAGAGCA 167
      |||||||
Db 19 CACCGTTCATTCTAGAGCA 1
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Db 19 CACCGTTCATTCTAGAGCA 1

RESULT 149
US-10-923-330-559/c
; Sequence 559, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923.330
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 559
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc_feature
; LOCATION: (20)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-559

Query Match          4.2%  Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 150 ACCGTTTCATTCTAGAGCA 168
      |||||||
Db 19 ACCGTTTCATTCTAGAGCA 1

RESULT 150
US-10-923-330-560/c
; Sequence 560, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923.330
; CURRENT FILING DATE: 2004-08-20
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; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 562
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(5)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (7)..(8)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (10)..(12)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (14)..(17)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
; US-10-923-330-562

Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 63.2%; Pred.No.1e+02;
Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0

QY 145 CTTCCACCGTTCATCTAG 163
DB 1 CUUCCACCGUUAUUCUAG 19
:::|||||::|::|::|

RESULT 152
US-10-923-330-563
; Sequence 563, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siNA)
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-08-20
; CURRENT APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/836,966
; PRIOR FILING DATE: 2004-04-16

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; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 563
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; NAME/KEY: misc feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(4)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (6)..(7)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (9)..(11)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (13)..(16)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-563

Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 63.2%; Pred. No. 1e+02;
Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

Qy 146 TTCACCGTTCATTCTAGA 164
:|||||:|:|:|:|
Db 1 UUCACCGGUCAUUCUAGA 19

RESULT 153
US-10-923-330-564
; Sequence 564, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923.330
; CURRENT FILING DATE: 2004-08-20
```

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; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 564
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; NAME/KEY: misc feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(3)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (5)..(6)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (8)..(10)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (12)..(15)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-564

Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 68.4%; Pred. No. 1e+02;
Matches 13; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

Qy 147 TCCACCGTTCATTCTAGAG 165
:|||||:|:|:|:|
Db 1 UCCACCGGUCAUUCUAGAG 19

RESULT 154
US-10-923-330-565
; Sequence 565, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
```

```
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MEH802-708-C)
; CURRENT APPLICATION NUMBER: US 10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 565
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; NAME/KEY: misc feature
; LOCATION: (1)..(1)
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(2)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (4)..(5)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (7)..(9)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (11)..(14)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (19)..(19)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-565
```

Query Match 4.2%; Score 19; DB 1; Length 21;  
Best Local Similarity 73.7%; Pred. No. 1e+02;

```
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;
Qy 148 CCACGGTTCATTCTAGAGC 166
| | | | | : | | | | |
Db 1 CCACCGUUCAUUCUAGAGC 19

RESULT 155
US-10-923-330-566
; Sequence 566, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MEH802-708-C)
; CURRENT APPLICATION NUMBER: US 10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 566
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; NAME/KEY: misc feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (3)..(4)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (6)..(8)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (10)..(13)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (18)..(18)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
```

```
;/ FEATURE:
;/ NAME/KEY: misc_feature
;/ LOCATION: (20)..(20)
;/ OTHER INFORMATION: n stands for thymidine
;/ FEATURE:
;/ NAME/KEY: misc_feature
;/ LOCATION: (21)..(21)
;/ OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-566
```

```
Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 149 CACGGTTCATTCTAGACGA 167
      |||||:|:|:|:|:|:|
Db 1 CACGGUUCUUCUAGACGA 19
```

```
RESULT 156
US-10-923-330-567
; Sequence 567, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
```

```
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 567
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siRNA sense region
; FEATURE:
; LOCATION: (1)..(1)
; NAME/KEY: misc_feature
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (2)..(3)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (5)..(7)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
```

```
;/ FEATURE:
;/ NAME/KEY: misc_feature
;/ LOCATION: (9)..(12)
;/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
;/ FEATURE:
;/ NAME/KEY: misc_feature
;/ LOCATION: (17)..(17)
;/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
;/ FEATURE:
;/ NAME/KEY: misc_feature
;/ LOCATION: (20)..(20)
;/ OTHER INFORMATION: n stands for thymidine
;/ FEATURE:
;/ NAME/KEY: misc_feature
;/ LOCATION: (21)..(21)
;/ OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-567
```

```
Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 150 ACCGTTTCATTCTAGACAA 168
      |||||:|:|:|:|:|:|
Db 1 ACCGUUCUUCUAGACGA 19
```

```
RESULT 157
US-10-923-330-568
; Sequence 568, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 568
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siRNA sense region
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
```

```

;
; NAME/KEY: misc feature
; LOCATION: (7)..(8)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
;
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (12)..(15)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
;
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (17)..(18)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
;
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
;
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-568

```

```

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy 300 GAAGAGTTGGCTCTGTCA 318
    |||||:||||:|:|:|
Db 1 GAAGAGUUGGCUCUGUCA 19

```

```

RESULT 158
US-10-923-330-570/c
; Sequence 570, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 570
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
;
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region

```

```

;
; NAME/KEY: misc feature
; LOCATION: (1)..(2)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
;
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (7)..(7)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
;
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (11)..(11)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
;
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (14)..(14)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
;
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
;
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-570

```

```

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy 145 CTTCCACCGTTCATTCTAG 163
    |||||:|||||:|:|:|
Db 19 CTTCCACCGTTCATTCTAG 1

```

```

RESULT 159
US-10-923-330-571/c
; Sequence 571, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 571
; LENGTH: 21

```

```
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
/
/ NAME/KEY: misc_feature
/ LOCATION: (1)..(3)
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (8)..(8)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (12)..(12)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (15)..(15)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (20)..(20)
/ OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (21)..(21)
/ OTHER INFORMATION: n stands for thymidine
US-10-923-330-571
```

Query Match 4.2%; Score 19; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy 146 TTCACCGTTCATCTCTAGA 164
Db 19 TTCACCGTTCATCTCTAGA 1
```

```
RESULT 160
US-10-923-330-572/c
/ Sequence 572, Application US/10923330
/ Publication No. US20050153916A1
/ GENERAL INFORMATION:
/ APPLICANT: McSwiggen, James
/ APPLICANT: Beigelman, Leonid
/ TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
/ FILE REFERENCE: 400/209 (MBHB02-708-C)
/ CURRENT APPLICATION NUMBER: US/10/923,330
/ CURRENT FILING DATE: 2004-08-20
/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-05-23
/ PRIOR APPLICATION NUMBER: PCT/US03/05346
/ PRIOR FILING DATE: 2003-02-20
/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ PRIOR FILING DATE: 2003-02-20
/ Remaining Prior Application data removed - See File Wrapper or PALM.
```

```
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 572
/ LENGTH: 21
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (1)..(4)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (9)..(9)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (13)..(13)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (16)..(16)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (20)..(20)
/ OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (21)..(21)
/ OTHER INFORMATION: n stands for thymidine
US-10-923-330-572
```

Query Match 4.2%; Score 19; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy 147 TCCACCGTTCATCTCTAGAG 165
Db 19 TCCACCGTTCATCTCTAGAG 1
```

```
RESULT 161
US-10-923-330-573/c
/ Sequence 573, Application US/10923330
/ Publication No. US20050153916A1
/ GENERAL INFORMATION:
/ APPLICANT: McSwiggen, James
/ APPLICANT: Beigelman, Leonid
/ TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
/ FILE REFERENCE: 400/209 (MBHB02-708-C)
/ CURRENT APPLICATION NUMBER: US/10/923,330
/ CURRENT FILING DATE: 2004-08-20
/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 10/826,966
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-11-23
/ PRIOR APPLICATION NUMBER: US 10/444,853
/ PRIOR FILING DATE: 2003-05-23
/ PRIOR APPLICATION NUMBER: PCT/US03/05346
```

```

; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 573
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:  sRNA antisense region
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (2)..(5)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (10)..(10)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (14)..(14)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (17)..(17)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-573

```

```

Query Match      4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 148 CCACGGTTCATTCTAGAGC 166
      |||||
Db 19 CCACGGTTCATTCTAGAGC 1

```

```

RESULT 162
US-10-923-330-574/c
; Sequence 574, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MEH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059

```

```

; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 574
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:  sRNA antisense region
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (3)..(6)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (11)..(11)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (15)..(15)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (18)..(18)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-574

```

```

Query Match      4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 149 CACCGTTCATTCTAGAGCA 167
      |||||
Db 19 CACCGTTCATTCTAGAGCA 1

```

```

RESULT 163
US-10-923-330-575/c
; Sequence 575, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MEH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390

```

```
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 575
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(2)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (4)..(7)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (12)..(12)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (16)..(16)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (19)..(19)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-575
```

```
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 150 ACCGTTCTTCTAGCAAA 168
Db 19 ACCGTTCTTCTAGCAAA 1
```

```
RESULT 164
US-10-923-330-576/c
; Sequence 576, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siNA)
```

```
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 576
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (4)..(4)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (9)..(11)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (14)..(19)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-576
```

```
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Qy 300 GAAGAGTTGGGCTCTGTCA 318
Db 19 GAAGAGTTGGGCTCTGTCA 1
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RESULT 165
US-10-923-330-578
; Sequence 578, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
```

```
/ APPLICANT: McSwiggen, James
/ TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
/ OTHER INFORMATION: Expression Using Short Interfering RNA (siRNA)
/ FILE REFERENCE: 400/209 (MBH02-708-C)
/ CURRENT APPLICATION NUMBER: US/10/923,330
/ PRIOR FILING DATE: 2004-08-20
/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 10/826,966
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-11-23
/ PRIOR APPLICATION NUMBER: US 10/444,853
/ PRIOR FILING DATE: 2003-05-23
/ PRIOR APPLICATION NUMBER: PCT/US03/05346
/ PRIOR FILING DATE: 2003-02-20
/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 578
/ LENGTH: 21
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (1)..(1)
/ OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (1)..(5)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (6)..(6)
/ OTHER INFORMATION: 2'-deoxy
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (7)..(8)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (9)..(9)
/ OTHER INFORMATION: 2'-deoxy
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (10)..(12)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (13)..(13)
/ OTHER INFORMATION: 2'-deoxy
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (14)..(17)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (18)..(19)
/ OTHER INFORMATION: 2'-deoxy
/ FEATURE:
```

```
/ NAME/KEY: misc_feature
/ LOCATION: (20)..(20)
/ OTHER INFORMATION: n stands for thymidine
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (21)..(21)
/ OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-578
```

```
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 63.2%; Pred. No. 1e+02;
Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0;
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```
Qy 145 CTTCGACCGTTCATCTAG 163
      |||||:|:|:|:|:|
Db 1 CUUCCACCGUUAUUCUAG 19
```

```
RESULT 166
US-10-923-330-579
/ Sequence 579, Application US/10923330
/ Publication No. US20050153916A1
/ GENERAL INFORMATION:
/ APPLICANT: McSwiggen, James
/ APPLICANT: Beigelman, Leonid
/ TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
/ FILE REFERENCE: 400/209 (MBH02-708-C)
/ CURRENT APPLICATION NUMBER: US/10/923,330
/ CURRENT FILING DATE: 2004-08-20
/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 10/826,966
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-11-23
/ PRIOR APPLICATION NUMBER: US 10/444,853
/ PRIOR FILING DATE: 2003-05-23
/ PRIOR APPLICATION NUMBER: PCT/US03/05346
/ PRIOR FILING DATE: 2003-02-20
/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 579
/ LENGTH: 21
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (1)..(1)
/ OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (1)..(4)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (5)..(5)
/ OTHER INFORMATION: 2'-deoxy
/ FEATURE:
```



```
; NAME/KEY: misc_feature
; LOCATION: (6)..(7)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (8)..(8)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (9)..(11)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (12)..(12)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (13)..(16)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (17)..(19)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
; US-10-923-330-579

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 63.2%; Pred. No. 1e+02;
Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

Qy 146 TTCCACCGTTCATTCTAG 164
Db 1 UCCACCGUUAUCUAG 19

RESULT 167
US-10-923-330-580
; Sequence 580, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siRNA)
; FILE REFERENCE: 400/209 (MHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20

; NAME/KEY: misc_feature
; LOCATION: (6)..(7)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (8)..(8)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (9)..(11)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (12)..(12)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (13)..(16)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (17)..(19)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
; US-10-923-330-580

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 68.4%; Pred. No. 1e+02;
Matches 13; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

Qy 147 TCCACCGTTCATTCTAG 165
Db 1 UCCACCGUUAUCUAG 19

RESULT 168
US-10-923-330-581
; Sequence 581, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
```

```
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 581
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(2)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (3)..(3)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (4)..(5)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (6)..(6)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (7)..(9)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (10)..(10)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (11)..(14)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (15)..(18)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
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```
; LOCATION: (19)..(19)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-581
```

```
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;
Qy 148 CCACCGTCATCTCAGACG 166
|||||:|||||
Db 1 CCACCGUUCUUCUAGAGC 19
```

```
RESULT 169
US-10-923-330-582
; Sequence 582, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 582
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
```



```
Best Local Similarity 73.7%; Pred. NO. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

QY 150 ACCGTTTCATTCTAGAGCAA 168
Db 1 ACCGUUCAUUCUAGAGCAA 19

RESULT 171
US-10-923-330-584
; Sequence 584, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siRNA)
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 584
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siRNA antisense region
; NAME/KEY: misc feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(6)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (7)..(8)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (9)..(11)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (12)..(15)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (16)..(16)

Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. NO. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

QY 300 GAAGAGTTGGGCTCTGTCA 318
Db 1 GAAGAGUUGGCGCUGUCA 19

RESULT 172
US-10-923-330-586/c
; Sequence 586, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sina Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 586
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siRNA antisense region
; NAME/KEY: misc feature
; LOCATION: (1)..(2)
```

OTHER INFORMATION: 2'-deoxy-2'-fluoro  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (3)..(6)  
OTHER INFORMATION: 2'-deoxy  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (7)..(7)  
OTHER INFORMATION: 2'-deoxy-2'-fluoro  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (8)..(10)  
OTHER INFORMATION: 2'-deoxy  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (11)..(11)  
OTHER INFORMATION: 2'-deoxy-2'-fluoro  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (12)..(13)  
OTHER INFORMATION: 2'-deoxy  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (14)..(14)  
OTHER INFORMATION: 2'-deoxy-2'-fluoro  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (15)..(19)  
OTHER INFORMATION: 2'-deoxy  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (20)..(20)  
OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (21)..(21)  
OTHER INFORMATION: n stands for thymidine  
US-10-923-330-586

Query Match 4.2%; Score 19; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATTCTAG 163  
|||||  
Db 19 CTTCCACCGTTCATTCTAG 1

RESULT 173  
US-10-923-330-587/c  
Sequence 587, Application US/10923330  
Publication No. US20050153916A1  
GENERAL INFORMATION:  
APPLICANT: Sirna Therapeutics, Inc.  
APPLICANT: McSwiggen, James  
APPLICANT: Beigelman, Leonid  
TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
FILE REFERENCE: 400/209 (MHB02-708-C)  
CURRENT APPLICATION NUMBER: US/10/923,330  
CURRENT FILING DATE: 2004-08-20  
PRIORITY FILING DATE: 2004-08-20  
PRIORITY FILING DATE: 2004-05-24  
PRIORITY FILING DATE: 2002-07-17  
PRIORITY FILING DATE: 2004-05-24  
PRIORITY FILING DATE: 2004-05-24  
PRIORITY FILING DATE: 2004-04-16  
PRIORITY FILING DATE: 2004-01-14  
PRIORITY FILING DATE: 2003-11-24

PRIOR APPLICATION NUMBER: US 10/693,059  
PRIOR FILING DATE: 2003-11-23  
PRIOR APPLICATION NUMBER: US 10/444,853  
PRIOR FILING DATE: 2003-05-23  
PRIOR APPLICATION NUMBER: PCT/US03/05346  
PRIOR FILING DATE: 2003-02-20  
PRIOR APPLICATION NUMBER: PCT/US03/05028  
PRIOR FILING DATE: 2003-02-20  
Remaining Prior Application data removed - See File Wrapper or PALM.  
NUMBER OF SEQ ID NOS: 768  
SOFTWARE: PatentIn version 3.3  
SEQ ID NO 587  
LENGTH: 21  
TYPE: RNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (1)..(3)  
OTHER INFORMATION: 2'-deoxy-2'-fluoro  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (4)..(7)  
OTHER INFORMATION: 2'-deoxy  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (8)..(8)  
OTHER INFORMATION: 2'-deoxy-2'-fluoro  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (9)..(11)  
OTHER INFORMATION: 2'-deoxy  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (12)..(12)  
OTHER INFORMATION: 2'-deoxy-2'-fluoro  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (13)..(14)  
OTHER INFORMATION: 2'-deoxy  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (15)..(15)  
OTHER INFORMATION: 2'-deoxy-2'-fluoro  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (16)..(19)  
OTHER INFORMATION: 2'-deoxy  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (20)..(20)  
OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (21)..(21)  
OTHER INFORMATION: n stands for thymidine  
US-10-923-330-587

Query Match 4.2%; Score 19; DB 1; Length 21;  
Best Local Similarity 100.0%; Pred. No. 1e+02;  
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 146 TTCACCGTTCATTCTAGA 164  
|||||  
Db 19 TTCACCGTTCATTCTAGA 1

RESULT 174  
US-10-923-330-588/c  
Sequence 588, Application US/10923330  
Publication No. US20050153916A1  
GENERAL INFORMATION:

```
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; PRIORITY FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 588
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc feature
; LOCATION: (1)..(4)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (5)..(8)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (9)..(9)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (10)..(12)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (13)..(13)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (14)..(15)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (16)..(16)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (17)..(19)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
```

```
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-588

Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 147 TCCACCGTTCATTCTAGAG 165
Db 19 TCCACCGTTCATTCTAGAG 1

RESULT 175
US-10-923-330-589/c
; Sequence 589, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 589
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (2)..(5)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (6)..(9)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (10)..(10)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
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; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (11)..(13)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (14)..(14)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (15)..(16)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (17)..(17)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (18)..(19)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-589
```

```
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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QY 148 CCACCGTTCATTCTAGAGC 166
Db 19 CCACCGTTCATTCTAGAGC 1
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## RESULT 176

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US-10-923-330-590/c
; Sequence 590, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
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; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 590
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (2)..(2)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (3)..(6)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (7)..(10)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (11)..(11)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (12)..(14)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (15)..(15)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (16)..(17)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (18)..(18)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (19)..(19)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-590
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Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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QY 149 CACCGTTCATTCTAGAGCA 167
Db 19 CACCGTTCATTCTAGAGCA 1
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## RESULT 177

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US-10-923-330-591/c
; Sequence 591, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
```

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; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siNA)
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 591
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(2)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (3)..(3)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (4)..(7)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (8)..(11)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (12)..(12)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (13)..(15)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (16)..(16)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (17)..(18)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (19)..(19)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
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```
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-591

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 150 ACGTTCATTCTAGAGCAA 168
Db 19 ACGTTCATTCTAGAGCAA 1

RESULT 178
US-10-923-330-592/c
; Sequence 592, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siNA)
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 592
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (2)..(3)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (4)..(4)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
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; NAME/KEY: misc_feature
; LOCATION: (5)..(8)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (9)..(11)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (12)..(13)
; OTHER INFORMATION: 2'-deoxy
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (14)..(19)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
;
US-10-923-330-592

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 300 GAAGAGTTGGGCTGTGCA 318
Db 19 GAAGAGTTGGGCTGTGCA 1

RESULT 179
US-10-923-330-594
; Sequence 594, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 594
; LENGTH: 21
; TYPE: RNA

; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siRNA sense region
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(5)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (6)..(6)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (7)..(8)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (9)..(9)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (10)..(12)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (13)..(13)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (14)..(17)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (18)..(19)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
;
US-10-923-330-594

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 63.2%; Pred. No. 1e+02;
Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATCTAG 163
Db 1 CUUCCACCGUUAUCUAG 19

RESULT 180
US-10-923-330-595
; Sequence 595, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
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/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 10/826,966
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-11-23
/ PRIOR APPLICATION NUMBER: US 10/444,853
/ PRIOR FILING DATE: 2003-05-23
/ PRIOR APPLICATION NUMBER: PCT/US03/05346
/ PRIOR FILING DATE: 2003-02-20
/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ PRIOR FILING DATE: 2003-02-20
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 595
/ LENGTH: 21
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
/ NAME/KEY: misc_feature
/ LOCATION: (1)..(1)
/ OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (1)..(4)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (5)..(5)
/ OTHER INFORMATION: 2'-O-methyl
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (6)..(7)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (8)..(8)
/ OTHER INFORMATION: 2'-O-methyl
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (9)..(11)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (12)..(12)
/ OTHER INFORMATION: 2'-O-methyl
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (13)..(16)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (17)..(19)
/ OTHER INFORMATION: 2'-O-methyl
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (20)..(20)
/ OTHER INFORMATION: n stands for thymidine
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (21)..(21)
/ OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-595
```

```
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 63.2%; Pred. No. 1e+02;
Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

Oy 146 TTCACCGTTCATTCTAGA 164
Db 1 UUCACCGUUCAUUCUAGA 19

RESULT 181
US-10-923-330-596
/ Sequence 596, Application US/10923330
/ Publication No. US20050153916A1
/ GENERAL INFORMATION:
/ APPLICANT: Sirna Therapeutics, Inc.
/ APPLICANT: McGswiggen, James
/ APPLICANT: Beigelman, Leonid
/ TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
/ TITLE OF INVENTION: Expression Using Short Interfering RNA (siNA)
/ FILE REFERENCE: 400/209 (WBHB02-708-C)
/ CURRENT APPLICATION NUMBER: US/10/923,330
/ CURRENT FILING DATE: 2004-08-20
/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 10/826,966
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-11-23
/ PRIOR APPLICATION NUMBER: US 10/444,853
/ PRIOR FILING DATE: 2003-05-23
/ PRIOR APPLICATION NUMBER: PCT/US03/05346
/ PRIOR FILING DATE: 2003-02-20
/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 596
/ LENGTH: 21
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
/ NAME/KEY: misc_feature
/ LOCATION: (1)..(1)
/ OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (1)..(3)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (4)..(4)
/ OTHER INFORMATION: 2'-O-methyl
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (5)..(6)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (7)..(7)
/ OTHER INFORMATION: 2'-O-methyl
/ FEATURE:
/ NAME/KEY: misc_feature
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; LOCATION: (8)..(10)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (11)..(11)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (12)..(15)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (16)..(19)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-596

Query Match      4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 69.4%; Pred. No. 1e+02;
Matches 13; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

Qy      147  TCACCGTTCATTCTAGAC 165
Db      1    UCCACCGUCAUUCUAGAC 19

RESULT 182
US-10-923-330-597
; Sequence 597, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 597
; TYPE: RNA
; ORGANISM: Artificial Sequence

; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(2)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (3)..(3)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (4)..(5)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (6)..(6)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (7)..(9)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (10)..(10)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (11)..(14)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (16)..(18)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (19)..(19)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-597

Query Match      4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

Qy      148  CCACCGTTCATTCTAGAC 166
Db      1    CCACCGUCAUUCUAGAC 19

RESULT 183
US-10-923-330-598
; Sequence 598, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
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/ CURRENT FILING DATE: 2004-08-20
/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 10/826,966
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-11-23
/ PRIOR APPLICATION NUMBER: US 10/444,853
/ PRIOR FILING DATE: 2003-05-23
/ PRIOR APPLICATION NUMBER: PCT/US03/05346
/ PRIOR FILING DATE: 2003-02-20
/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 598
/ LENGTH: 21
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
/ NAME/KEY: misc_feature
/ LOCATION: (1)..(1)
/ OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (1)..(1)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (3)..(4)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (5)..(5)
/ OTHER INFORMATION: 2'-O-methyl
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (6)..(8)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (9)..(9)
/ OTHER INFORMATION: 2'-O-methyl
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (10)..(13)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (14)..(17)
/ OTHER INFORMATION: 2'-O-methyl
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (18)..(18)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (19)..(19)
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/ OTHER INFORMATION: 2'-O-methyl
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (20)..(20)
/ OTHER INFORMATION: n stands for thymidine
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (21)..(21)
/ OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
/ US-10-923-330-598
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Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;
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Qy 149 CACCGTTTCATTCTAGAGCA 167
|||||:|||||
Db 1 CACCGUUCUUCUAGAGCA 19
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RESULT 184
US-10-923-330-599
/ Sequence 599, Application US/10923330
/ Publication No. US20050153916A1
/ GENERAL INFORMATION:
/ APPLICANT: Sirna Therapeutics, Inc.
/ APPLICANT: McSwiggen, James
/ APPLICANT: Beigelman, Leonid
/ TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
/ FILE REFERENCE: 400/209 (MBH02-708-C)
/ CURRENT APPLICATION NUMBER: US/10/923,330
/ CURRENT FILING DATE: 2004-08-20
/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 10/826,966
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-11-23
/ PRIOR APPLICATION NUMBER: US 10/444,853
/ PRIOR FILING DATE: 2003-05-23
/ PRIOR APPLICATION NUMBER: PCT/US03/05346
/ PRIOR FILING DATE: 2003-02-20
/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 599
/ LENGTH: 21
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
/ NAME/KEY: misc_feature
/ LOCATION: (1)..(1)
/ OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (1)..(1)
/ OTHER INFORMATION: 2'-O-methyl
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (2)..(3)
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; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (4)..(4)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (5)..(7)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (8)..(8)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (9)..(12)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (13)..(16)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (17)..(17)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (18)..(19)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-599

Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

Qy 150 ACCGTTCACTTAGAGCAA 168
||||:||||:||||:
Db 1 ACCGUCAUUCUAGAGCAA 19

RESULT 185
US-10-923-330-600
; Sequence 600, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923.330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
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; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 600
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(6)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (7)..(8)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (9)..(11)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (12)..(15)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (16)..(16)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (17)..(18)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (19)..(19)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-600

Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

Qy 300 GAAGAGTTGGGCTCTGTCA 318
||||:||||:||||:
Db 1 GAAGAGUUGGCUUCUGUCA 19

RESULT 186
US-10-923-330-602/c
; Sequence 602, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
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; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHH02-708-C)
; CURRENT APPLICATION NUMBER: US 10/923,330
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 602
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc_feature
; LOCATION: (1)..(2)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (3)..(6)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (7)..(7)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (8)..(10)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (11)..(11)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (12)..(13)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (14)..(14)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (15)..(19)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
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; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-602
Query Match 4.2%; Score 19; DB 1; Length 21;
Best local Similarity 100.0%; Pred. NO. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 145 CTTCCACCGTTTCATTCTAG 163
Db 19 CTTCCACCGTTTCATTCTAG 1
RESULT 187
US-10-923-330-603/c
; Sequence 603, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHH02-708-C)
; CURRENT APPLICATION NUMBER: US 10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 603
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc_feature
; LOCATION: (1)..(3)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (4)..(7)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (8)..(8)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (9)..(11)
; OTHER INFORMATION: 2'-O-methyl
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/ TYPE: RNA
/ NAME/KEY: misc_feature
/ LOCATION: (12)..(12)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (13)..(14)
/ OTHER INFORMATION: 2'-O-methyl
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (15)..(15)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (16)..(19)
/ OTHER INFORMATION: 2'-O-methyl
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (20)..(20)
/ OTHER INFORMATION: 3'-Internucleotide Linkage
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (21)..(21)
/ OTHER INFORMATION: n stands for thymidine
US-10-923-330-603
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```
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Qy 146 TTCACCGTTCATTCTAGA 164
    |||||
Db 19 TTCACCGTTCATTCTAGA 1
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## RESULT 188

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US-10-923-330-604/c
; Sequence 604, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 604
; LENGTH: 21
```

```
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (1)..(4)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (5)..(8)
/ OTHER INFORMATION: 2'-O-methyl
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (9)..(9)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (10)..(12)
/ OTHER INFORMATION: 2'-O-methyl
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (13)..(13)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (14)..(15)
/ OTHER INFORMATION: 2'-O-methyl
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (16)..(16)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (17)..(19)
/ OTHER INFORMATION: 2'-O-methyl
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (20)..(20)
/ OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (21)..(21)
/ OTHER INFORMATION: n stands for thymidine
US-10-923-330-604
```

```
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

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Qy 147 TTCACCGTTCATTCTAGAG 165
    |||||
Db 19 TTCACCGTTCATTCTAGAG 1
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## RESULT 189

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US-10-923-330-605/c
; Sequence 605, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
```

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/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 10/826,966
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-11-23
/ PRIOR APPLICATION NUMBER: US 10/444,853
/ PRIOR FILING DATE: 2003-05-23
/ PRIOR APPLICATION NUMBER: PCT/US03/05346
/ PRIOR FILING DATE: 2003-02-20
/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: Patentin version 3.3
/ SEQ ID NO 605
/ LENGTH: 21
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
/ NAME/KEY: misc_feature
/ LOCATION: (1)..(1)
/ OTHER INFORMATION: 2'-O-methyl
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (2)..(5)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (6)..(9)
/ OTHER INFORMATION: 2'-O-methyl
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (10)..(10)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (11)..(13)
/ OTHER INFORMATION: 2'-O-methyl
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (14)..(14)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (15)..(16)
/ OTHER INFORMATION: 2'-O-methyl
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (17)..(17)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (18)..(19)
/ OTHER INFORMATION: 2'-O-methyl
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (20)..(20)
/ OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (21)..(21)
/ OTHER INFORMATION: n stands for thymidine
/ US-10-923-330-605
```

```
Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY      148 CCACCGTTCATTCTAGAGC 166
      |||||||
Db      19 CCACCGTTCATTCTAGAGC 1

RESULT 190
US-10-923-330-606/c
/ Sequence 606, Application US/10923330
/ Publication No. US20050153916A1
/ GENERAL INFORMATION:
/ APPLICANT: Sirna Therapeutics, Inc.
/ APPLICANT: McSwiggen, James
/ APPLICANT: Beigelman, Leonid
/ TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
/ FILE REFERENCE: 400/209 (WBH02-708-C)
/ CURRENT APPLICATION NUMBER: US/10/923,330
/ CURRENT FILING DATE: 2004-08-20
/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 10/826,966
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-11-23
/ PRIOR APPLICATION NUMBER: US 10/444,853
/ PRIOR FILING DATE: 2003-05-23
/ PRIOR APPLICATION NUMBER: PCT/US03/05346
/ PRIOR FILING DATE: 2003-02-20
/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: Patentin version 3.3
/ SEQ ID NO 606
/ LENGTH: 21
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
/ NAME/KEY: misc_feature
/ LOCATION: (1)..(1)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (2)..(2)
/ OTHER INFORMATION: 2'-O-methyl
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (3)..(6)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (7)..(10)
/ OTHER INFORMATION: 2'-O-methyl
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (11)..(11)
/ OTHER INFORMATION: 2'-deoxy-2'-fluoro
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (12)..(14)
/ OTHER INFORMATION: 2'-O-methyl
/ FEATURE:
```



```
; NAME/KEY: misc feature
; LOCATION: (15)..(15)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (16)..(17)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (18)..(18)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (19)..(19)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
; US-10-923-330-606
;
; Query Match 4.2%; Score 19; DB 1; Length 21;
; Best Local Similarity 100.0%; Pred. No. 1e+02;
; Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
;
; QY 149 CACGGTTCATTCTAGACGA 167
; DB 19 CACGGTTCATTCTAGACGA 1
;
; RESULT 191
; US-10-923-330-607/c
; Sequence 607, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 607
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(2)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (3)..(3)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (4)..(7)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (8)..(11)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (12)..(12)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (13)..(15)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (16)..(16)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (17)..(18)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (19)..(19)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
; US-10-923-330-607
;
; Query Match 4.2%; Score 19; DB 1; Length 21;
; Best Local Similarity 100.0%; Pred. No. 1e+02;
; Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
;
; QY 150 ACCGTTTCATTCTAGACAA 168
; DB 19 ACCGTTTCATTCTAGACAA 1
;
; RESULT 192
; US-10-923-330-608/c
; Sequence 608, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
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; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 608
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (2)..(3)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (4)..(4)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (5)..(8)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (9)..(11)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (12)..(13)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (14)..(19)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-608
```

```
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 300 GAAGAGTTGGGCTCTGTCA 318
Db 19 GAAGAGTTGGGCTCTGTCA 1
```

```
RESULT 193
US-10-923-330-610
; Sequence 610, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 610
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; NAME/KEY: misc feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-610
```

```
Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 63.2%; Pred. No. 1e+02;
Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0;
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```
Qy 145 CTTCCACCGTTCATTCTAG 163
Db 1 CUUCCACCGUUCUUCUAG 19
```

```
RESULT 194
US-10-923-330-611
; Sequence 611, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
```

```

; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 612
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: s1nA sense region
; FEATURE:
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
;
US-10-923-330-612

Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 68.4%; Pred. No. le+02;
Matches 13; Conservative 6; Mismatches 0; Indels 0; Gaps

Qy 147 TCACCGGTTTCATTCTAGAG 165
Db 1 UGCACCGUUCUUCUAGAG 19

```

```

RESULT 196
US-10-923-330-613
; Sequence 613, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirta Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siRNA)
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14

```

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/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-11-23
/ PRIOR APPLICATION NUMBER: US 10/444,853
/ PRIOR FILING DATE: 2003-05-23
/ PRIOR APPLICATION NUMBER: PCT/US03/05346
/ PRIOR FILING DATE: 2003-02-20
/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ PRIOR FILING DATE: 2003-02-20
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 613
/ LENGTH: 21
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (1)..(1)
/ OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (20)..(20)
/ OTHER INFORMATION: n stands for thymidine
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (21)..(21)
/ OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-613

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

QY 148 CCACGTTTCATCTAGAGC 166
Db 1 CCACGUUCAUUCUAGAGC 19
|||||:|||||

RESULT 197
US-10-923-330-614
/ Sequence 614, Application US/10923330
/ Publication No. US20050153916A1
/ GENERAL INFORMATION:
/ APPLICANT: Sirna Therapeutics, Inc.
/ APPLICANT: McSwiggen, James
/ APPLICANT: Beigelman, Leonid
/ TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
/ FILE REFERENCE: 400/209 (MBH02-708-C)
/ CURRENT APPLICATION NUMBER: US/10/923,330
/ CURRENT FILING DATE: 2004-08-20
/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 10/826,966
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-11-23
/ PRIOR APPLICATION NUMBER: US 10/444,853
/ PRIOR FILING DATE: 2003-05-23
/ PRIOR APPLICATION NUMBER: PCT/US03/05346
/ PRIOR FILING DATE: 2003-02-20
/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ PRIOR FILING DATE: 2003-02-20
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 615
/ LENGTH: 21
/ TYPE: RNA
```

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/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ PRIOR FILING DATE: 2003-02-20
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 614
/ LENGTH: 21
/ TYPE: RNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (1)..(1)
/ OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (20)..(20)
/ OTHER INFORMATION: n stands for thymidine
/ FEATURE:
/ NAME/KEY: misc_feature
/ LOCATION: (21)..(21)
/ OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-614

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

QY 149 CACCGTTTCATCTAGAGCA 167
Db 1 CACCGUUCAUUCUAGAGCA 19
|||||:|||||

RESULT 198
US-10-923-330-615
/ Sequence 615, Application US/10923330
/ Publication No. US20050153916A1
/ GENERAL INFORMATION:
/ APPLICANT: Sirna Therapeutics, Inc.
/ APPLICANT: McSwiggen, James
/ APPLICANT: Beigelman, Leonid
/ TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
/ FILE REFERENCE: 400/209 (MBH02-708-C)
/ CURRENT APPLICATION NUMBER: US/10/923,330
/ CURRENT FILING DATE: 2004-08-20
/ PRIOR APPLICATION NUMBER: PCT/US03/04088
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 60/396,600
/ PRIOR FILING DATE: 2002-07-17
/ PRIOR APPLICATION NUMBER: PCT/US04/16390
/ PRIOR FILING DATE: 2004-05-24
/ PRIOR APPLICATION NUMBER: US 10/826,966
/ PRIOR FILING DATE: 2004-04-16
/ PRIOR APPLICATION NUMBER: US 10/757,803
/ PRIOR FILING DATE: 2004-01-14
/ PRIOR APPLICATION NUMBER: US 10/720,448
/ PRIOR FILING DATE: 2003-11-24
/ PRIOR APPLICATION NUMBER: US 10/693,059
/ PRIOR FILING DATE: 2003-11-23
/ PRIOR APPLICATION NUMBER: US 10/444,853
/ PRIOR FILING DATE: 2003-05-23
/ PRIOR APPLICATION NUMBER: PCT/US03/05346
/ PRIOR FILING DATE: 2003-02-20
/ PRIOR APPLICATION NUMBER: PCT/US03/05028
/ PRIOR FILING DATE: 2003-02-20
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 768
/ SOFTWARE: PatentIn version 3.3
/ SEQ ID NO 615
/ LENGTH: 21
/ TYPE: RNA
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; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-615

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

Qy 150 ACCGTCATCTAGACAA 168
Db 1 ACCGUUCUUCAGACAA 19
      |||||:|||||
RESULT 199
US-10-923-330-616
; Sequence 616, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 616
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-615

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

Qy 150 ACCGTCATCTAGACAA 168
Db 1 ACCGUUCUUCAGACAA 19
      |||||:|||||
RESULT 199
US-10-923-330-616
; Sequence 616, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 616
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA sense region
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-615
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; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-616

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 73.7%; Pred. No. 1e+02;
Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

Qy 300 GAAGAGTGGGCTCTCTCA 318
Db 1 GAAGAGUUGGGCUCUGUCA 19
      |||||:|||||
RESULT 200
US-10-923-330-618/c
; Sequence 618, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 618
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-618

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Qy 145 CTTCCACGGTTCATTCTAG 163  
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 Db 19 CTTCCACGGTTCATTCTAG 1

## RESULT 201

US-10-923-330-619/c  
 ; Sequence 619, Application US/10923330  
 ; Publication No. US20050153916A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Sirna Therapeutics, Inc.  
 ; APPLICANT: McSwiggen, James  
 ; APPLICANT: Beigelman, Leonid  
 ; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
 ; FILE REFERENCE: 400/209 (WBH02-708-C)  
 ; CURRENT APPLICATION NUMBER: US/10/923,330  
 ; CURRENT FILING DATE: 2004-08-20  
 ; PRIOR APPLICATION NUMBER: PCT/US03/04088  
 ; PRIOR FILING DATE: 2004-05-24  
 ; PRIOR APPLICATION NUMBER: US 60/396,600  
 ; PRIOR FILING DATE: 2002-07-17  
 ; PRIOR APPLICATION NUMBER: PCT/US04/16390  
 ; PRIOR FILING DATE: 2004-05-24  
 ; PRIOR APPLICATION NUMBER: US 10/757,803  
 ; PRIOR FILING DATE: 2004-05-24  
 ; PRIOR APPLICATION NUMBER: PCT/US03/05346  
 ; PRIOR FILING DATE: 2004-04-16  
 ; PRIOR APPLICATION NUMBER: US 10/826,966  
 ; PRIOR FILING DATE: 2004-01-14  
 ; PRIOR APPLICATION NUMBER: US 10/720,448  
 ; PRIOR FILING DATE: 2003-11-24  
 ; PRIOR APPLICATION NUMBER: US 10/693,059  
 ; PRIOR FILING DATE: 2003-11-23  
 ; PRIOR APPLICATION NUMBER: PCT/US03/05346  
 ; PRIOR FILING DATE: 2003-05-23  
 ; PRIOR APPLICATION NUMBER: PCT/US03/05028  
 ; PRIOR FILING DATE: 2003-02-20  
 ; Remaining Prior Application data removed - See File Wrapper or PALM.  
 ; NUMBER OF SEQ ID NOS: 768  
 ; SOFTWARE: PatentIn version 3.3  
 ; SEQ ID NO 619  
 ; LENGTH: 21  
 ; TYPE: RNA  
 ; ORGANISM: Artificial Sequence  
 ; FEATURE:  
 ; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region  
 ; NAME/KEY: misc feature  
 ; LOCATION: (20)..(20)  
 ; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage  
 ; FEATURE:  
 ; NAME/KEY: misc feature  
 ; LOCATION: (21)..(21)  
 ; OTHER INFORMATION: n stands for thymidine  
 US-10-923-330-619

Query Match 4.2%; Score 19; DB 1; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 1e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 146 TTCACCGTTCATTCTAGA 164  
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 Db 19 TTCACCGTTCATTCTAGA 1

## RESULT 202

US-10-923-330-620/c  
 ; Sequence 620, Application US/10923330  
 ; Publication No. US20050153916A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Sirna Therapeutics, Inc.

; APPLICANT: McSwiggen, James  
 ; APPLICANT: Beigelman, Leonid  
 ; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
 ; FILE REFERENCE: 400/209 (WBH02-708-C)  
 ; CURRENT APPLICATION NUMBER: US/10/923,330  
 ; CURRENT FILING DATE: 2004-08-20  
 ; PRIOR APPLICATION NUMBER: PCT/US03/04088  
 ; PRIOR FILING DATE: 2004-05-24  
 ; PRIOR APPLICATION NUMBER: US 60/396,600  
 ; PRIOR FILING DATE: 2002-07-17  
 ; PRIOR APPLICATION NUMBER: PCT/US04/16390  
 ; PRIOR FILING DATE: 2004-05-24  
 ; PRIOR APPLICATION NUMBER: US 10/826,966  
 ; PRIOR FILING DATE: 2004-04-16  
 ; PRIOR APPLICATION NUMBER: US 10/757,803  
 ; PRIOR FILING DATE: 2004-01-14  
 ; PRIOR APPLICATION NUMBER: US 10/720,448  
 ; PRIOR FILING DATE: 2003-11-24  
 ; PRIOR APPLICATION NUMBER: US 10/693,059  
 ; PRIOR FILING DATE: 2003-11-23  
 ; PRIOR APPLICATION NUMBER: US 10/444,853  
 ; PRIOR FILING DATE: 2003-05-23  
 ; PRIOR APPLICATION NUMBER: PCT/US03/05346  
 ; PRIOR FILING DATE: 2003-02-20  
 ; PRIOR APPLICATION NUMBER: PCT/US03/05028  
 ; PRIOR FILING DATE: 2003-02-20  
 ; Remaining Prior Application data removed - See File Wrapper or PALM.  
 ; NUMBER OF SEQ ID NOS: 768  
 ; SOFTWARE: PatentIn version 3.3  
 ; SEQ ID NO 620  
 ; LENGTH: 21  
 ; TYPE: RNA  
 ; ORGANISM: Artificial Sequence  
 ; FEATURE:  
 ; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region  
 ; NAME/KEY: misc feature  
 ; LOCATION: (20)..(20)  
 ; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage  
 ; FEATURE:  
 ; NAME/KEY: misc feature  
 ; LOCATION: (21)..(21)  
 ; OTHER INFORMATION: n stands for thymidine  
 US-10-923-330-620

Query Match 4.2%; Score 19; DB 1; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 1e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 147 TTCACCGTTCATTCTAGAG 165  
 |||||  
 Db 19 TTCACCGTTCATTCTAGAG 1

## RESULT 203

US-10-923-330-621/c  
 ; Sequence 621, Application US/10923330  
 ; Publication No. US20050153916A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Sirna Therapeutics, Inc.  
 ; APPLICANT: McSwiggen, James  
 ; APPLICANT: Beigelman, Leonid  
 ; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
 ; FILE REFERENCE: 400/209 (WBH02-708-C)  
 ; CURRENT APPLICATION NUMBER: US/10/923,330  
 ; CURRENT FILING DATE: 2004-08-20  
 ; PRIOR APPLICATION NUMBER: PCT/US03/04088  
 ; PRIOR FILING DATE: 2004-05-24  
 ; PRIOR APPLICATION NUMBER: US 60/396,600  
 ; PRIOR FILING DATE: 2002-07-17  
 ; PRIOR APPLICATION NUMBER: PCT/US04/16390

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; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 621
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
;
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
;
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-621

Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 148 CCACCGTTCATTCTAGAGC 166
Db 19 CCACCGTTCATTCTAGAGC 1

RESULT 204
US-10-923-330-622/c
; Sequence 622, Application US/10923330
; Publication No US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MHB02-708-C)
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 622
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
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; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 622
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
;
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage
;
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: n stands for thymidine
US-10-923-330-622

Query Match 4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 149 CACCGTTCATTCTAGAGCA 167
Db 19 CACCGTTCATTCTAGAGCA 1

RESULT 205
US-10-923-330-623/c
; Sequence 623, Application US/10923330
; Publication No US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MHB02-708-C)
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 623
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
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; FEATURE:  
 ; NAME/KEY: misc\_feature  
 ; LOCATION: (20)..(20)  
 ; OTHER INFORMATION: n stands for thymidine  
 ; FEATURE:  
 ; NAME/KEY: misc\_feature  
 ; LOCATION: (21)..(21)  
 ; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage  
 US-10-923-330-623  
 Query Match 4.2%; Score 19; DB 1; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 1e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 150 ACCGTTCAATTCAGACAA 168  
 Db 19 ACCGTTCAATTCAGACAA 1  
 RESULT 206  
 US-10-923-330-624/c  
 ; Sequence 624, Application US/10923330  
 ; Publication No. US20050153916A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Sirna Therapeutics, Inc.  
 ; APPLICANT: McSwiggen, James  
 ; APPLICANT: Beigelman, Leonid  
 ; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
 ; FILE REFERENCE: 400/209 (MEHB02-708-C)  
 ; CURRENT APPLICATION NUMBER: US/10/923,330  
 ; CURRENT FILING DATE: 2004-08-20  
 ; PRIOR APPLICATION NUMBER: PCT/US03/04088  
 ; PRIOR FILING DATE: 2004-05-24  
 ; PRIOR APPLICATION NUMBER: US 60/396,600  
 ; PRIOR FILING DATE: 2002-07-17  
 ; PRIOR APPLICATION NUMBER: PCT/US04/16390  
 ; PRIOR FILING DATE: 2004-05-24  
 ; PRIOR APPLICATION NUMBER: US 10/826,966  
 ; PRIOR FILING DATE: 2004-04-16  
 ; PRIOR APPLICATION NUMBER: US 10/757,803  
 ; PRIOR FILING DATE: 2004-01-14  
 ; PRIOR APPLICATION NUMBER: US 10/720,448  
 ; PRIOR FILING DATE: 2003-11-23  
 ; PRIOR APPLICATION NUMBER: US 10/693,059  
 ; PRIOR FILING DATE: 2003-11-23  
 ; PRIOR APPLICATION NUMBER: US 10/444,853  
 ; PRIOR FILING DATE: 2003-05-23  
 ; PRIOR APPLICATION NUMBER: PCT/US03/05346  
 ; PRIOR FILING DATE: 2003-02-20  
 ; PRIOR APPLICATION NUMBER: PCT/US03/05028  
 ; PRIOR FILING DATE: 2003-02-20  
 ; Remaining Prior Application data removed - See File Wrapper or PALM.  
 ; NUMBER OF SEQ ID NOS: 768  
 ; SOFTWARE: PatentIn version 3.3  
 ; SEQ ID NO 624  
 ; LENGTH: 21  
 ; TYPE: RNA  
 ; ORGANISM: Artificial Sequence  
 ; FEATURE:  
 ; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region  
 ; NAME/KEY: misc\_feature  
 ; LOCATION: (20)..(20)  
 ; OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage  
 ; FEATURE:  
 ; NAME/KEY: misc\_feature  
 ; LOCATION: (21)..(21)  
 ; OTHER INFORMATION: n stands for thymidine  
 US-10-923-330-624  
 Query Match 4.2%; Score 19; DB 1; Length 21;  
 Best Local Similarity 100.0%; Pred. No. 1e+02;  
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 300 GAAGAGTTGGGCTCTGTCA 318  
 Db 19 GAAGAGTTGGGCTCTGTCA 1  
 RESULT 207  
 US-10-923-330-626/c  
 ; Sequence 626, Application US/10923330  
 ; Publication No. US20050153916A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Sirna Therapeutics, Inc.  
 ; APPLICANT: McSwiggen, James  
 ; APPLICANT: Beigelman, Leonid  
 ; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene  
 ; FILE REFERENCE: 400/209 (MEHB02-708-C)  
 ; CURRENT APPLICATION NUMBER: US/10/923,330  
 ; CURRENT FILING DATE: 2004-08-20  
 ; PRIOR APPLICATION NUMBER: PCT/US03/04088  
 ; PRIOR FILING DATE: 2004-05-24  
 ; PRIOR APPLICATION NUMBER: US 60/396,600  
 ; PRIOR FILING DATE: 2002-07-17  
 ; PRIOR APPLICATION NUMBER: PCT/US04/16390  
 ; PRIOR FILING DATE: 2004-05-24  
 ; PRIOR APPLICATION NUMBER: US 10/826,966  
 ; PRIOR FILING DATE: 2004-04-16  
 ; PRIOR APPLICATION NUMBER: US 10/757,803  
 ; PRIOR FILING DATE: 2004-01-14  
 ; PRIOR APPLICATION NUMBER: US 10/720,448  
 ; PRIOR FILING DATE: 2003-11-24  
 ; PRIOR APPLICATION NUMBER: US 10/693,059  
 ; PRIOR FILING DATE: 2003-11-23  
 ; PRIOR APPLICATION NUMBER: US 10/444,853  
 ; PRIOR FILING DATE: 2003-05-23  
 ; PRIOR APPLICATION NUMBER: PCT/US03/05346  
 ; PRIOR FILING DATE: 2003-02-20  
 ; PRIOR APPLICATION NUMBER: PCT/US03/05028  
 ; PRIOR FILING DATE: 2003-02-20  
 ; Remaining Prior Application data removed - See File Wrapper or PALM.  
 ; NUMBER OF SEQ ID NOS: 768  
 ; SOFTWARE: PatentIn version 3.3  
 ; SEQ ID NO 626  
 ; LENGTH: 21  
 ; TYPE: RNA  
 ; ORGANISM: Artificial Sequence  
 ; FEATURE:  
 ; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region  
 ; NAME/KEY: misc\_feature  
 ; LOCATION: (1)..(2)  
 ; OTHER INFORMATION: 2'-deoxy-2'-fluoro  
 ; FEATURE:  
 ; NAME/KEY: misc\_feature  
 ; LOCATION: (3)..(6)  
 ; OTHER INFORMATION: 2'-O-methyl  
 ; FEATURE:  
 ; NAME/KEY: misc\_feature  
 ; LOCATION: (7)..(7)  
 ; OTHER INFORMATION: 2'-deoxy-2'-fluoro  
 ; FEATURE:  
 ; NAME/KEY: misc\_feature  
 ; LOCATION: (8)..(10)  
 ; OTHER INFORMATION: 2'-O-methyl  
 ; FEATURE:  
 ; NAME/KEY: misc\_feature  
 ; LOCATION: (11)..(11)  
 ; OTHER INFORMATION: 2'-deoxy-2'-fluoro  
 ; FEATURE:  
 ; NAME/KEY: misc\_feature  
 ; LOCATION: (12)..(13)  
 ; OTHER INFORMATION: 2'-O-methyl



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; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (14)..(14)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (15)..(19)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-626

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCCACCGTTCATTCTAG 163
Db 19 CTTCCACCGTTCATTCTAG 1

RESULT 208
US-10-923-330-627/c
; Sequence 627, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 627
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(3)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
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; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (4)..(7)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (8)..(8)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (9)..(11)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (12)..(12)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (13)..(14)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (15)..(15)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (16)..(19)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-627

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 146 TTCACCGTTCATTCTAGA 164
Db 19 TTCACCGTTCATTCTAGA 1

RESULT 209
US-10-923-330-628/c
; Sequence 628, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
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; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-629

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 148 CCACCGTTCATTCTAGAGC 166
Db 19 CCACCGTTCATTCTAGAGC 1

RESULT 211
US-10-923-330-630/c
; Sequence 630, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE OF INVENTION: Expression Using Short Interfering RNA (siNA)
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 630
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (2)..(2)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (3)..(6)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
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; NAME/KEY: misc_feature
; LOCATION: (7)..(10)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (11)..(11)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (12)..(14)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (15)..(15)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (16)..(17)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (18)..(18)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (19)..(19)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-630

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 149 CACCGTTCATTCTAGAGCA 167
Db 19 CACCGTTCATTCTAGAGCA 1

RESULT 212
US-10-923-330-631/c
; Sequence 631, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE OF INVENTION: Expression Using Short Interfering RNA (siNA)
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
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; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 631
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(2)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (3)..(3)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (4)..(7)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (8)..(11)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (12)..(12)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (13)..(15)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (16)..(16)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (17)..(18)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (19)..(19)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-631
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Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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QY 150 ACCGTTCACTTAGAGCAA 168
      |||||
Db 19 ACCGTTCACTTAGAGCAA 1
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RESULT 213
US-10-923-330-632/c
; Sequence 632, Application US/10923330
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; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; TITLE OF INVENTION: Expression Using Short Interfering RNA (siNA)
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 632
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (2)..(3)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (4)..(4)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (5)..(8)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (9)..(11)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (12)..(13)
; OTHER INFORMATION: 2'-O-methyl
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (14)..(19)
; OTHER INFORMATION: 2'-deoxy-2'-fluoro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc_feature
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; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-632

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 300 GAAGAGTTGGCTCTGTCA 318
Db 19 GAAGAGTTGGCTCTGTCA 1

RESULT 214
US-10-923-330-634/c
; Sequence 634, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 634
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-635

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 146 TTCACCGTTCATTCTAGA 164
Db 19 TTCACCGTTCATTCTAGA 1

RESULT 216
US-10-923-330-636/c
; Sequence 636, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: Patentin version 3.3
; SEQ ID NO 634
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-634

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 145 CTTCACCGTTCATTCTAG 163
Db 19 CTTCACCGTTCATTCTAG 1
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; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-08-23
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 636
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
; US-10-923-330-636

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 147 TCACCGTTCATTCTAGAG 165
Db 19 TCACCGTTCATTCTAGAG 1

RESULT 217
US-10-923-330-637/c
; Sequence 637, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-08-23
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 636
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
; US-10-923-330-636

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 147 TCACCGTTCATTCTAGAG 165
Db 19 TCACCGTTCATTCTAGAG 1

RESULT 217
US-10-923-330-637/c
; Sequence 637, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-08-23
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 636
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
; US-10-923-330-636
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; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 637
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
; US-10-923-330-637

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 148 CCACCGTTCATTCTAGAGC 166
Db 19 CCACCGTTCATTCTAGAGC 1

RESULT 218
US-10-923-330-638/c
; Sequence 638, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBH02-708-C)
; CURRENT APPLICATION NUMBER: US/10/923,330
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/757,803
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
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; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 638
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-638

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 149 CACGTTTCATTCTAGAGCA 167
Db 19 CACGTTTCATTCTAGAGCA 1

RESULT 219
US-10-923-330-639/c
; Sequence 639, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 639
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-639

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 149 CACGTTTCATTCTAGAGCA 167
Db 19 CACGTTTCATTCTAGAGCA 1

RESULT 219
US-10-923-330-639/c
; Sequence 639, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-01-14
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 639
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
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```
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-639

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 150 ACCGTTTCATTCTAGAGCAA 168
Db 19 ACCGTTTCATTCTAGAGCAA 1

RESULT 220
US-10-923-330-640/c
; Sequence 640, Application US/10923330
; Publication No. US20050153916A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Telomerase Gene
; FILE REFERENCE: 400/209 (MBHB02-708-C)
; CURRENT FILING DATE: 2004-08-20
; PRIOR APPLICATION NUMBER: US/10/923,330
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: PCT/US03/04088
; PRIOR FILING DATE: 2002-07-17
; PRIOR APPLICATION NUMBER: US 60/396,600
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: PCT/US04/16390
; PRIOR FILING DATE: 2004-05-24
; PRIOR APPLICATION NUMBER: US 10/826,966
; PRIOR FILING DATE: 2004-04-16
; PRIOR APPLICATION NUMBER: US 10/720,448
; PRIOR FILING DATE: 2003-11-24
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2003-11-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: PCT/US03/05346
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: PCT/US03/05028
; PRIOR FILING DATE: 2003-02-20
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 768
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 640
; LENGTH: 21
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
; NAME/KEY: misc_feature
; LOCATION: (20)..(20)
; OTHER INFORMATION: n stands for thymidine
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (21)..(21)
; OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety
US-10-923-330-640

Query Match          4.2%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 300 GAAGAGTTGGGCTCTGTCA 318
Db 19 GAAGAGTTGGGCTCTGTCA 1
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RESULT 221
US-10-900-231-126
; Sequence 126, Application US/10900231
; Publication No. US2005017602A1
; GENERAL INFORMATION:
; APPLICANT: Kilian, Andrzej
; APPLICANT: Botwell, David
; TITLE OF INVENTION: VERTEBRATE TELOMERASE GENES AND PROTEINS AND USES
; TITLE OF INVENTION: THEREOF
; FILE REFERENCE: TMGL 407C3
; CURRENT APPLICATION NUMBER: US/10/900,231
; CURRENT FILING DATE: 2004-07-27
; NUMBER OF SEQ ID NOS: 155
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 126
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthesized
; OTHER INFORMATION: Amplification Primer Design based on EST Sequence
; OTHER INFORMATION: GenBank Accession Number AA281296
US-10-900-231-126

Query Match          4.0%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 93;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GGGTTGCGGAGGTGGGC 18
Db 1 GGGTTGCGGAGGTGGGC 18

RESULT 222
US-10-325-810-543/c
; Sequence 543, Application US/10325810
; Publication No. US20030204069A1
; GENERAL INFORMATION:
; APPLICANT: Cech, Thomas R.
; Lingner, Joachim
; Nakamura, Toru
; Chapman, Karen B.
; Morin, Gregg B.
; Harley, Calvin B.
; Andrews, William H.
; TITLE OF INVENTION: Human Telomerase Catalytic Subunit
; NUMBER OF SEQUENCES: 633
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/325,810
; FILING DATE: 20-Dec-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/402,181
; FILING DATE: 29-Sep-1997
; APPLICATION NUMBER: US 08/724,643
; FILING DATE: 01-OCT-1996
; APPLICATION NUMBER: US 08/844,419
; FILING DATE: 18-APR-1997
; APPLICATION NUMBER: US 08/846,017

;
; FILING DATE: 25-APR-1997
; APPLICATION NUMBER: US 08/851,843
; FILING DATE: 06-MAY-1997
; APPLICATION NUMBER: US 08/854,050
; FILING DATE: 09-MAY-1997
; APPLICATION NUMBER: US 08/911,312
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: US 08/912,951
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: US 08/915,503
; APPLICATION NUMBER: WO PCT/US97/17885
; FILING DATE: 01-OCT-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Ausenhus, Scott L.
; REGISTRATION NUMBER: 42,271
; REFERENCE/DOCKET NUMBER: 015389-002620US
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 543:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 18 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; FEATURE:
; NAME/KEY: -
; LOCATION: 1..18
; OTHER INFORMATION: /note= "antisense hTERT molecule"
; SEQUENCE DESCRIPTION: SEQ ID NO: 543:
US-10-325-810-543

Query Match          3.6%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 1.4e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 149 CACGTTTCATTCTAGGC 166
Db 18 CACCTTCATTCTAGGC 1

RESULT 223
US-10-877-124-543/c
; Sequence 543, Application US/10877124
; Publication No. US20040242529A1
; GENERAL INFORMATION:
; APPLICANT: Cech, Thomas R.
; Lingner, Joachim
; Nakamura, Toru
; Chapman, Karen B.
; Morin, Gregg B.
; Harley, Calvin B.
; Andrews, William H.
; TITLE OF INVENTION: Human Telomerase Catalytic Subunit
; NUMBER OF SEQUENCES: 727
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/877,124
; FILING DATE: 24-Jun-2004
; CLASSIFICATION: <Unknown>
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; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/432,503
; FILING DATE: 02-Nov-1999
; APPLICATION NUMBER: 08/974,549
; FILING DATE: <Unknown>
; APPLICATION NUMBER: US 08/844,419
; FILING DATE: 18-APR-1997
; APPLICATION NUMBER: US 08/846,017
; FILING DATE: 25-APR-1997
; APPLICATION NUMBER: US 08/851,843
; FILING DATE: 06-MAY-1997
; APPLICATION NUMBER: US 08/854,050
; FILING DATE: 09-MAY-1997
; APPLICATION NUMBER: US 08/911,312
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: US 08/912,951
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: US 08/915,503
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: WO PCT/US97/17618
; FILING DATE: 01-OCT-1997
; APPLICATION NUMBER: WO PCT/US97/17885
; FILING DATE: 01-OCT-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph Ted
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 015389-002610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 543:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 18 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; FEATURE:
; NAME/KEY: -
; LOCATION: 1..18
; OTHER INFORMATION: /note= "antisense hTRT molecule"
; SEQUENCE DESCRIPTION: SEQ ID NO: 543:
US-10-877-124-543

Query Match 3.6%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 1.4e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 149 CACCGTTCATCTAGAGC 166
Db 18 CACCGTTCATCTAGAGC 1

RESULT 224
US-10-877-022-543/c
; Sequence 543, Application US/10877022
; Publication No. US20040247613A1
; GENERAL INFORMATION:
; APPLICANT: Cech, Thomas R.
; Lingner, Joachim
; Nakamura, Toru
; Chapman, Karen B.
; Morin, Gregg B.
; Harley, Calvin B.
; Andrews, William H.
; TITLE OF INVENTION: Human Telomerase Catalytic Subunit
; NUMBER OF SEQUENCES: 727
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, Eighth Floor
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
```

```
;
; ZIP: 94111-3834
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA: US/10/877,022
; APPLICATION NUMBER: US/10/877,022
; FILING DATE: 24-Jun-2004
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/432,503
; FILING DATE: 02-Nov-1999
; APPLICATION NUMBER: 08/974,549
; FILING DATE: <Unknown>
; APPLICATION NUMBER: US 08/844,419
; FILING DATE: 18-APR-1997
; APPLICATION NUMBER: US 08/846,017
; FILING DATE: 25-APR-1997
; APPLICATION NUMBER: US 08/851,843
; FILING DATE: 06-MAY-1997
; APPLICATION NUMBER: US 08/854,050
; FILING DATE: 09-MAY-1997
; APPLICATION NUMBER: US 08/911,312
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: US 08/912,951
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: US 08/915,503
; FILING DATE: 14-AUG-1997
; APPLICATION NUMBER: WO PCT/US97/17618
; FILING DATE: 01-OCT-1997
; APPLICATION NUMBER: WO PCT/US97/17885
; FILING DATE: 01-OCT-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Apple, Randolph Ted
; REGISTRATION NUMBER: 36,429
; REFERENCE/DOCKET NUMBER: 015389-002610US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 576-0200
; TELEFAX: (415) 576-0300
; INFORMATION FOR SEQ ID NO: 543:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 18 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; FEATURE:
; NAME/KEY: -
; LOCATION: 1..18
; OTHER INFORMATION: /note= "antisense hTRT molecule"
; SEQUENCE DESCRIPTION: SEQ ID NO: 543:
US-10-877-022-543

Query Match 3.6%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 1.4e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 149 CACCGTTCATCTAGAGC 166
Db 18 CACCGTTCATCTAGAGC 1

RESULT 225
US-10-877-146-543/c
; Sequence 543, Application US/10877146
; Publication No. US20050013825A1
; GENERAL INFORMATION:
; APPLICANT: Cech, Thomas R.
; Lingner, Joachim
; Nakamura, Toru
; Chapman, Karen B.
; Morin, Gregg B.
```

```

Harley, Calvin B.
Andrews, William H.
TITLE OF INVENTION: Human Telomerase Catalytic Subunit
NUMBER OF SEQUENCES: 727
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
CITY: San Francisco
STATE: California
COUNTRY: USA
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/877,146
FILING DATE: 24-Jun-2004
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/432,503
FILING DATE: 02-Nov-1999
APPLICATION NUMBER: 08/974,549
FILING DATE: <Unknown>
APPLICATION NUMBER: US 08/844,419
FILING DATE: 18-Apr-1997
APPLICATION NUMBER: US 08/846,017
FILING DATE: 25-Apr-1997
APPLICATION NUMBER: US 08/851,843
FILING DATE: 06-May-1997
APPLICATION NUMBER: US 08/854,050
FILING DATE: 09-May-1997
APPLICATION NUMBER: US 08/911,312
FILING DATE: 14-Aug-1997
APPLICATION NUMBER: US 08/912,951
FILING DATE: 14-Aug-1997
APPLICATION NUMBER: US 08/915,503
FILING DATE: 14-Aug-1997
APPLICATION NUMBER: WO PCT/US97/17618
FILING DATE: 01-Oct-1997
APPLICATION NUMBER: WO PCT/US97/17885
FILING DATE: 01-Oct-1997
ATTORNEY/AGENT INFORMATION:
NAME: Apple, Randolph Ted
REGISTRATION NUMBER: 36,429
REFERENCE/DOCKET NUMBER: 015389-002610US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
TELEFAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 543:
SEQUENCE CHARACTERISTICS:
LENGTH: 18 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA
FEATURE:
NAME/KEY: -
LOCATION: 1..18
OTHER INFORMATION: /note= "antisense hTERT molecule"
SEQUENCE DESCRIPTION: SEQ ID NO: 543:
US-10-877-146-543

```

```

Query Match          3.6%;   Score 16.4;   DB 1;   Length 18;
Best Local Similarity 94.4%;   Pred. No. 1.4e+02;
Matches 17;   Conservative 0;   Mismatches 1;   Indels 0;   Gaps 0;

QY 149 CACCGTTCATTCTAGAGC 166
      |||||
DB 18 CACCGTTCATTCTAGAGC 1

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RESULT 226
US-09-997-8668-13
; Sequence 13, Application US/09997868
; Publication No. US20030031654A1
; GENERAL INFORMATION:
; APPLICANT: Gorman, Cornelia M.,
; Groskreutz, Debrya J.
; TITLE OF INVENTION: Prohormone Convertase Transformed Cells and
; Polypeptide Synthesis
; NUMBER OF SEQUENCES: 57
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WinPatIn (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/997,868
; FILING DATE: 12-Mar-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/887265
; FILING DATE: 22-MAY-1992
; APPLICATION NUMBER: 07/803631
; FILING DATE: 06-DEC-1992
; APPLICATION NUMBER: PCT/US92/10621
; FILING DATE: 04-DEC-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Love, Richard B.
; REGISTRATION NUMBER: 34,659
; REFERENCE/DOCKET NUMBER: P0749P3
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-5530
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 21 base pairs
; TYPE: Nucleic Acid
; STRANDEDNESS: Single
; TOPOLOGY: Linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 13:
US-09-997-868-13

Query Match 3.6%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 2e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps

QY 156 CATTCTAGACAAACAAAAA 176
Dd 1 CATTCTAGACAAAGACAA 21

RESULT 227
US-10-900-231-127/c
; Sequence 127, Application US/10900231
; Publication No. US20050176022A1
; GENERAL INFORMATION:
; APPLICANT: Killian, Andrzej
; APPLICANT: Bowtell, David
; TITLE OF INVENTION: VERTEBRATE TELOMERASE GENES AND PROTEINS AND USES
; TITLE OF INVENTION: THEREOF
; FILE REFERENCE: TWGL 407C3
; CURRENT APPLICATION NUMBER: US/10/900,231
; CURRENT FILING DATE: 2004-07-27
; NUMBER OF SEQ ID NOS: 155
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 127

```

```
; LENGTH: 21
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthesized
; OTHER INFORMATION: Amplification Primer Design based on EST Sequence
; OTHER INFORMATION: GenBank Accession Number AA281296
US-10-900-231-127

Query Match          3.6%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 2e+02;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 431 CAGGACTCGGCTCACACATGC 451
Db 21 CAGGACTCGGCTCACCATGC 1
|||||

RESULT 228
US-10-174-020-71/c
; Sequence 71, Application US/10174020
; Publication No. US20030232770A1
; GENERAL INFORMATION:
; APPLICANT: Brett P. Monia
; APPLICANT: Kenneth W. Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF HYPOTHETICAL TUMOR ENDOTHELIAL MARKER EXP
; FILE REFERENCE: RTS-0369
; CURRENT APPLICATION NUMBER: US/10/174,020
; CURRENT FILING DATE: 2002-06-17
; NUMBER OF SEQ ID NOS: 149
; SEQ ID NO 71
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-174-020-71

Query Match          3.5%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.9e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 362 GGCCGACAGGAAGGAACG 380
Db 20 GGCCACAGGAAGGAACG 2
|||||

RESULT 229
US-10-174-020-138
; Sequence 138, Application US/10174020
; Publication No. US20030232770A1
; GENERAL INFORMATION:
; APPLICANT: Brett P. Monia
; APPLICANT: Kenneth W. Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF HYPOTHETICAL TUMOR ENDOTHELIAL MARKER EXP
; FILE REFERENCE: RTS-0369
; CURRENT APPLICATION NUMBER: US/10/174,020
; CURRENT FILING DATE: 2002-06-17
; NUMBER OF SEQ ID NOS: 149
; SEQ ID NO 138
; LENGTH: 20
; TYPE: DNA
; ORGANISM: H. sapiens
; FEATURE:
US-10-174-020-138

Query Match          3.5%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.9e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 362 GGCCGACAGGAAGGAACG 380
Db 1 GGCCACAGGAAGGAACG 19
|||||
```

```
RESULT 230
US-10-714-195-84/c
; Sequence 84, Application US/10714195
; Publication No. US20050019785A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Joffre
; APPLICANT: Cronin, Maureen
; APPLICANT: Shak, Steve
; APPLICANT: Baselga, Jose
; TITLE OF INVENTION: GENE EXPRESSION PROFILING OF EGFR
; TITLE OF INVENTION: POSITIVE CANCER
; FILE REFERENCE: 39740-0005
; CURRENT APPLICATION NUMBER: US/10/714,195
; CURRENT FILING DATE: 2003-11-14
; PRIOR APPLICATION NUMBER: 60/427090
; PRIOR FILING DATE: 2003-11-15
; NUMBER OF SEQ ID NOS: 372
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 84
; LENGTH: 79
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-714-195-84

Query Match          3.5%; Score 15.8; DB 1; Length 79;
Best Local Similarity 54.2%; Pred. No. 1.9e+02;
Matches 32; Conservative 0; Mismatches 27; Indels 0; Gaps 0;

Qy 358 TTCAGCCGCGAGGAGGACGAGTCGCCGCGCGCGCGCGGATTCCTGAGCT 416
Db 65 TCCTGGGTGCACGTCGCCACAGCTCAGGGAATCGCGCGCGCGGAGCTCGCTCCGTT 7
|||||

RESULT 231
US-10-071-179-76
; Sequence 76, Application US/10071179
; Publication No. US2003010882A1
; GENERAL INFORMATION:
; APPLICANT: Bougueleret, Lydie
; TITLE OF INVENTION: A NUCLEIC ACID ENCODING A RETINOBLASTOMA BINDING PROTEIN (RBP-7)
; TITLE OF INVENTION: AND POLYMORPHIC MARKERS ASSOCIATED WITH SAID NUCLEIC ACID.
; FILE REFERENCE: GENSET.031A
; CURRENT APPLICATION NUMBER: US/10/071,179
; CURRENT FILING DATE: 2002-02-07
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/345,882
; PRIOR FILING DATE: EARLIER FILING DATE: 1999-06-30
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/091,315
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-06-30
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/111,909
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-12-10
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: Patent.pm
; SEQ ID NO 76
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: primer_bind
; LOCATION: 1..20
; OTHER INFORMATION: upstream amplification primer for SEQ 34, SEQ 55, SEQ 35, SEQ 56
US-10-071-179-76

Query Match          3.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 2.1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 166 CAAACAAATAATGTCAG 182
Db 1 CAAACAAATAATGTCAG 17
|||||
```

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RESULT 232
US-10-126-704-76
; Sequence 76, Application US/10126704
; Publication No. US20030170647A1
; GENERAL INFORMATION:
; APPLICANT: Bougueleret, Lydie
; TITLE OF INVENTION: A NUCLEIC ACID ENCODING A RETINOBLASTOMA BINDING PROTEIN (RBP-7)
; TITLE OF INVENTION: AND POLYMORPHIC MARKERS ASSOCIATED WITH SAID NUCLEIC ACID.
; FILE REFERENCE: 44. US5.DIV
; CURRENT APPLICATION NUMBER: US/10/126,704
; CURRENT FILING DATE: 2002-04-20
; PRIOR APPLICATION NUMBER: US 60/091,315
; PRIOR FILING DATE: 1998-06-30
; PRIOR APPLICATION NUMBER: US 60/111,909
; PRIOR FILING DATE: 1998-12-10
; NUMBER OF SEQ ID NOS: 140
; SOFTWARE: Patent.pm
; SEQ ID NO 76
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: primer_bind
; LOCATION: 1..20
; OTHER INFORMATION: upstream amplification primer for SEQ 34, SEQ 55, SEQ 35, SEQ 56
US-10-126-704-76

Query Match          3.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 2.1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 166 CAACAAAATAATGTCAG 182
Db 1 CAACAAAATAATGTCAG 17

RESULT 233
US-10-224-005-154
; Sequence 154, Application US/10224005
; Publication No. US20030143732A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, James
; APPLICANT: Fosnaugh, Kathy
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Adenosine A1 Receptor (AD
; TITLE OF INVENTION: Gene Expression Using Short Interfering RNA
; FILE REFERENCE: 900/041 (MBHB01-1110-A)
; CURRENT APPLICATION NUMBER: US/10/224,005
; CURRENT FILING DATE: 2002-08-20
; PRIOR APPLICATION NUMBER: US 60/315,315
; PRIOR FILING DATE: 2001-08-28
; NUMBER OF SEQ ID NOS: 347
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 154
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Target sequence/siNA sense x
US-10-224-005-154

Query Match          3.3%; Score 14.8; DB 1; Length 19;
Best Local Similarity 77.8%; Pred. No. 2.2e+02;
Matches 14; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 21 GCGAGGGGCTTCTCCGG 38
Db 1 GCGAGGGGAGGUGGCCG 18

RESULT 234
US-10-224-005-315/c
; Sequence 315, Application US/10224005

```

```

; Publication No. US20030143732A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyne Pharmaceuticals, Inc.
; APPLICANT: McSwiggen, James
; APPLICANT: Fosnaugh, Kathy
; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Adenosine A1 Receptor (AD
; TITLE OF INVENTION: Gene Expression Using Short Interfering RNA
; FILE REFERENCE: 900/041 (MBHB01-1110-A)
; CURRENT APPLICATION NUMBER: US/10/224,005
; CURRENT FILING DATE: 2002-08-20
; PRIOR APPLICATION NUMBER: US 60/315,315
; PRIOR FILING DATE: 2001-08-28
; NUMBER OF SEQ ID NOS: 347
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 315
; LENGTH: 19
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: siNA antisense region
US-10-224-005-315

```

```

Query Match          3.3%; Score 14.8; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 2.2e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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QY 21 GCGAGGGGCTTCTCCGG 38
Db 19 GCGAGGGGAGGUGGCCGT 2

```

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RESULT 235
US-10-091-625-4
; Sequence 4, Application US/10091625
; Publication No. US20030170636A1
; GENERAL INFORMATION:
; APPLICANT: Susan M. Freier
; TITLE OF INVENTION: ANTISENSE MODULATION OF JAGGED 2 EXPRESSION
; FILE REFERENCE: RTS-0244
; CURRENT APPLICATION NUMBER: US/10/091,625
; CURRENT FILING DATE: 2002-03-05
; NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 4
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: PCR Primer
US-10-091-625-4

```

```

Query Match          3.2%; Score 14.4; DB 1; Length 16;
Best Local Similarity 93.8%; Pred. No. 1.7e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```

```

QY 265 CCCGGGGCTTCTCCGG 280
Db 1 CCCAGGGCTTCTCCGG 16

```

```

RESULT 236
US-10-096-399A-4
; Sequence 4, Application US/10096399A
; Publication No. US20030185829A1
; GENERAL INFORMATION:
; APPLICANT: Koller, Erich
; APPLICANT: Shepard, Peter J.
; TITLE OF INVENTION: JAGGED 2 INHIBITORS FOR INDUCING APOPTOSIS
; FILE REFERENCE: ISPH-0860
; CURRENT APPLICATION NUMBER: US/10/096,399A
; CURRENT FILING DATE: 2002-03-12
; NUMBER OF SEQ ID NOS: 91
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 4

```

; LENGTH: 16  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Synthetic PCR primer  
US-10-096-399A-4

Query Match 3.2%; Score 14.4; DB 1; Length 16;  
Best Local Similarity 93.8%; Pred. No. 1.7e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 265 CCCGGGGCTTCTCCGG 280  
Db 1 CCCAGGGCTTCTCCGG 16

RESULT 237  
US-10-461-668-4  
; Sequence 4, Application US/10461668  
; Publication No. US20030207839A1  
; GENERAL INFORMATION:  
; APPLICANT: Susan M. Freier  
; TITLE OF INVENTION: ANTISENSE MODULATION OF JAGGED 2 EXPRESSION  
; FILE REFERENCE: RTS-0244  
; CURRENT APPLICATION NUMBER: US/10/461.668  
; CURRENT FILING DATE: 2003-06-13  
; PRIOR APPLICATION NUMBER: US/10/091.625  
; PRIOR FILING DATE: 2002-03-05  
; NUMBER OF SEQ ID NOS: 90  
; SEQ ID NO 4  
; LENGTH: 16  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: PCR Primer  
US-10-461-668-4

Query Match 3.2%; Score 14.4; DB 1; Length 16;  
Best Local Similarity 93.8%; Pred. No. 1.7e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 265 CCCGGGGCTTCTCCGG 280  
Db 1 CCCAGGGCTTCTCCGG 16

RESULT 238  
US-10-388-263-377  
; Sequence 377, Application US/10388263  
; Publication No. US20030228597A1  
; GENERAL INFORMATION:  
; APPLICANT: Cowseert, Lex M.  
; APPLICANT: Baker, Brenda F.  
; APPLICANT: McNeil, John  
; APPLICANT: Freier, Susan M.  
; APPLICANT: Sasnor, Henri M.  
; APPLICANT: Brooks, Douglas G.  
; APPLICANT: Ohashi, Cara  
; APPLICANT: Wyatt, Jacqueline R.  
; APPLICANT: Borchers, Alexander  
; APPLICANT: Vickers, Timothy A.  
; TITLE OF INVENTION: IDENTIFICATION OF GENETIC TARGETS FOR  
; MODULATION BY OLIGONUCLEOTIDES AND  
; GENERATION OF OLIGONUCLEOTIDES FOR GENE MODULATION  
; FILE REFERENCE: ISIS-4503  
; CURRENT APPLICATION NUMBER: US/10/388.263  
; CURRENT FILING DATE: 2003-03-12  
; NUMBER OF SEQ ID NOS: 947  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 377  
; LENGTH: 16  
; TYPE: DNA  
; ORGANISM: Artificial Sequence

; FEATURE:  
; OTHER INFORMATION: PCR Primer  
US-10-388-263-377

Query Match 3.2%; Score 14.4; DB 1; Length 16;  
Best Local Similarity 93.8%; Pred. No. 1.7e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 265 CCCGGGGCTTCTCCGG 280  
Db 1 CCCAGGGCTTCTCCGG 16

RESULT 239  
US-09-864-785-145  
; Sequence 145, Application US/09864785  
; Patent No. US20020177568A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Stinchcomb, Dan  
; APPLICANT: Draper, Ken  
; APPLICANT: McSwiggen, Jim  
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related  
; FILE REFERENCE: Levels of NF-Kappa B  
; CURRENT APPLICATION NUMBER: US/09/864,785  
; CURRENT FILING DATE: 2001-05-23  
; NUMBER OF SEQ ID NOS: 3929  
; SOFTWARE: Patentin version 3.0  
; SEQ ID NO 145  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid  
US-09-864-785-145

Query Match 3.2%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 75.0%; Pred. No. 1.9e+02;  
Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 131 CCTCGCGCTCGCGCT 146  
Db 2 CCUCCGCCUGCCGCCU 17

RESULT 240  
US-09-864-785-146  
; Sequence 146, Application US/09864785  
; Patent No. US20020177568A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Stinchcomb, Dan  
; APPLICANT: Draper, Ken  
; APPLICANT: McSwiggen, Jim  
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related  
; FILE REFERENCE: Levels of NF-Kappa B  
; CURRENT APPLICATION NUMBER: US/09/864,785  
; CURRENT FILING DATE: 2001-05-23  
; NUMBER OF SEQ ID NOS: 3929  
; SOFTWARE: Patentin version 3.0  
; SEQ ID NO 146  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid  
US-09-864-785-146

Query Match 3.2%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 75.0%; Pred. No. 1.9e+02;  
Matches 12; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 131 CCTGGCCTGCGCCT 146  
Db 1 CCUCCGCCUCCGCCU 16

RESULT 241  
US-10-138-674-7502/c  
; Sequence 7502, Application US/10138674  
; Publication No. US20040077565A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyne Pharmaceuticals, Inc.  
; APPLICANT: Pavco, Pam  
; APPLICANT: McSwiggen, Jim  
; APPLICANT: Stinchcomb, Dan  
; APPLICANT: Escobedo, Jaime  
; TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re  
; TITLE OF INVENTION: Levels of Vascular Endothelial Growth Factor Receptor  
; FILE REFERENCE: MBH00-876-N (400/049)  
; CURRENT FILING DATE: 2002-05-03  
; NUMBER OF SEQ ID NOS: 20822  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 7502  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-10-138-674-7502

Query Match 3.2%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 93.8%; Pred. No. 1.9e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 28 GTGGTGCCATTTTT 43  
Db 16 GTGATGCCATTTTT 1

RESULT 242  
US-10-287-949A-7502/c  
; Sequence 7502, Application US/10287949A  
; Publication No. US20040102389A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyne Pharmaceuticals, Inc.  
; APPLICANT: Pavco, Pam  
; APPLICANT: McSwiggen, Jim  
; APPLICANT: Stinchcomb, Dan  
; APPLICANT: Escobedo, Jaime  
; TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re  
; TITLE OF INVENTION: Levels of Vascular Endothelial Growth Factor Receptor  
; FILE REFERENCE: MBH00-876-N (400/049)  
; CURRENT APPLICATION NUMBER: US/10/287,949A  
; CURRENT FILING DATE: 2003-04-11  
; NUMBER OF SEQ ID NOS: 20822  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 7502  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-10-287-949A-7502

Query Match 3.2%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 93.8%; Pred. No. 1.9e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 28 GTGGTGCCATTTTT 43  
Db 16 GTGATGCCATTTTT 1

RESULT 243  
US-10-712-633-491/c  
; Sequence 491, Application US/10712633

; Publication No. US20040220128A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyne Pharmaceuticals, Inc.  
; APPLICANT: Pavco, Pamela  
; APPLICANT: Sandberg, Jennifer  
; APPLICANT: Gordon, Gilad  
; APPLICANT: McSwiggen, James  
; APPLICANT: Stinchcomb, Dan  
; TITLE OF INVENTION: NUCLEIC ACID BASED MODULATION OF VASCULAR ENDOTHELIAL GROWTH FACTOR  
; FILE REFERENCE: MBH02-325PCT (400/047)  
; CURRENT APPLICATION NUMBER: US/10/712,633  
; CURRENT FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/005,974  
; PRIOR FILING DATE: 1995-10-26  
; PRIOR APPLICATION NUMBER: US 08/584,040  
; PRIOR FILING DATE: 1996-01-08  
; PRIOR APPLICATION NUMBER: US 09/371,772  
; PRIOR FILING DATE: 1999-08-10  
; PRIOR APPLICATION NUMBER: US 09/708,690  
; PRIOR FILING DATE: 2000-11-07  
; PRIOR APPLICATION NUMBER: US 09/870,161  
; PRIOR FILING DATE: 2001-05-29  
; PRIOR APPLICATION NUMBER: US 60/334,461  
; PRIOR FILING DATE: 2001-11-30  
; PRIOR APPLICATION NUMBER: US 10/138,674  
; PRIOR FILING DATE: 2002-05-03  
; NUMBER OF SEQ ID NOS: 5989  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 491  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo Sapiens  
US-10-712-633-491

Query Match 3.2%; Score 14.4; DB 1; Length 17;  
Best Local Similarity 93.8%; Pred. No. 1.9e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 28 GTGGTGCCATTTTT 43  
Db 16 GTGATGCCATTTTT 1

RESULT 244  
US-10-054-387-24  
; Sequence 24, Application US/10054387  
; Publication No. US20030054365A1  
; GENERAL INFORMATION:  
; APPLICANT: Qiu, Minzhen  
; APPLICANT: Xu, Gang  
; APPLICANT: Humphreys, Robert  
; TITLE OF INVENTION: CANCER CELL VACCINE  
; FILE REFERENCE: U.S. Application 09/205,995, (CIP)  
; CURRENT APPLICATION NUMBER: US/10/054,387  
; CURRENT FILING DATE: 2002-01-22  
; PRIOR APPLICATION NUMBER: 09/036,746  
; PRIOR FILING DATE: 1998-03-09  
; PRIOR APPLICATION NUMBER: 08/661,627  
; PRIOR FILING DATE: 1996-06-11  
; NUMBER OF SEQ ID NOS: 79  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 24  
; LENGTH: 18  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURES:  
; OTHER INFORMATION: Description of Artificial Sequence: antisense  
; OTHER INFORMATION: oligonucleotide corresponding to a specific region  
; OTHER INFORMATION: of the mouse Ii gene.  
US-10-054-387-24

Query Match 3.2%; Score 14.4; DB 1; Length 18;

Best Local Similarity 93.8%; Pred. No. 2.1e+02; DB 1; Length 17;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 220 GGTGGCTGGCCAGCC 235  
Db 1 GGTGGCTGGCCAGCC 16  
|||||

RESULT 245  
US-10-093-958-22/c  
; Sequence 22, Application US/10093958  
; Publication No. US2003004423A1  
; GENERAL INFORMATION:  
; APPLICANT: Gillies, Stephen  
; APPLICANT: Jeffrey, Way  
; TITLE OF INVENTION: Expression Technology for Proteins Containing a Hybrid Isotype An  
; FILE REFERENCE: LEX-016  
; CURRENT APPLICATION NUMBER: US/10/093,958  
; CURRENT FILING DATE: 2002-03-07  
; PRIOR APPLICATION NUMBER: US 60/274,096  
; PRIOR FILING DATE: 2001-03-07  
; NUMBER OF SEQ ID NOS: 50  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 22  
; LENGTH: 19  
; TYPE: DNA  
; ORGANISM: artificial sequence  
; FEATURE:  
; OTHER INFORMATION: forward primer for gamma 1 hinge region  
US-10-093-958-22

Query Match 3.2%; Score 14.4; DB 1; Length 19;  
Best Local Similarity 93.8%; Pred. No. 2.4e+02;  
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 300 GAAGATTGGGCTCTG 315  
Db 19 GAAGATTGGGCTCTG 4  
|||||

RESULT 246  
US-10-967-254-21  
; Sequence 21, Application US/10967254  
; Publication No. US2005016423A1  
; GENERAL INFORMATION:  
; APPLICANT: Smith, Terry  
; APPLICANT: Maher, Majella  
; APPLICANT: Martin, Cara  
; APPLICANT: Jannes, Geert  
; APPLICANT: Rossau, Rudi  
; APPLICANT: Van Der Weide, Marjo  
; TITLE OF INVENTION: Nucleic acid probes and methods for detecting  
; TITLE OF INVENTION: Clinically important fungal pathogens  
; FILE REFERENCE: 2551-49  
; CURRENT APPLICATION NUMBER: US/10/967,254  
; CURRENT FILING DATE: 2004-10-19  
; PRIOR APPLICATION NUMBER: US/09/662,462  
; PRIOR FILING DATE: 2000-09-15  
; PRIOR APPLICATION NUMBER: PCT/EP00/04714  
; PRIOR FILING DATE: 2000-05-24  
; PRIOR APPLICATION NUMBER: EP 99870109.8  
; PRIOR FILING DATE: 1999-05-28  
; PRIOR APPLICATION NUMBER: US 60/138,621  
; PRIOR FILING DATE: 1999-06-11  
; NUMBER OF SEQ ID NOS: 43  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 21  
; LENGTH: 17  
; TYPE: DNA  
; ORGANISM: Aspergillus versicolor  
US-10-967-254-21

Query Match 3.1%; Score 14; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 2.1e+02;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 328 CTCTCGGGGCGAG 341  
Db 2 CTCTCGGGGCGAG 15  
|||||

RESULT 247  
US-09-961-077-826  
; Sequence 826, Application US/09961077  
; Publication No. US20030014775A1  
; GENERAL INFORMATION:  
; APPLICANT: Zwick, Michael G.  
; Edington, Brent E.  
; McSwiggen, James A.  
; Merlo, Patricia Ann Owens  
; Guo, Lining  
; Skokut, Thomas A.  
; Young, Scott A.  
; Folkerts, Otto  
; Merlo, Donald J.  
; TITLE OF INVENTION: COMPOSITION AND METHODS FOR  
; MODULATION OF GENE EXPRESSION  
; IN PLANTS  
; NUMBER OF SEQUENCES: 1263  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Lyon & Lyon  
; STREET: 633 West Fifth Street  
; Suite 4700  
; CITY: Los Angeles  
; STATE: California  
; COUNTRY: U.S.A.  
; ZIP: 90071-2066  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: IBM P.C. DOS 5.0  
; SOFTWARE: Word Perfect 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/961,077  
; FILING DATE: 21-Sep-2001  
; CLASSIFICATION: <Unknown>  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/679,645  
; FILING DATE: July 12, 1996  
; APPLICATION NUMBER: 60/001,135  
; FILING DATE: July 13, 1995  
; APPLICATION NUMBER: 08/300,726  
; FILING DATE: September 2, 1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Warburg, Richard J.  
; REGISTRATION NUMBER: 32,327  
; REFERENCE/DOCKET NUMBER: 219/247  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (213) 489-1600  
; TELEFAX: (213) 955-0440  
; TELEX: 67-3510  
; INFORMATION FOR SEQ ID NO: 826:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 17 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; SEQUENCE DESCRIPTION: SEQ ID NO: 826:  
US-09-961-077-826

Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 64.7%; Pred. No. 2.2e+02;  
Matches 11; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

```
QY 106 CGCTGACTTTTCAGCGG 122
Db 1 CCGCGCCUUCAGCGG 17

RESULT 248
US-09-848-754A-3581
; Sequence 3581, Application US/09848754A
; Publication No. US20030073207A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Growth Factor Receptors
; FILE REFERENCE: MBH00-958-I (400/018)
; CURRENT APPLICATION NUMBER: US/09/848,754A
; CURRENT FILING DATE: 2001-05-03
; NUMBER OF SEQ ID NOS: 9645
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3581
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-848-754A-3581

Query Match 3.1%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 2.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 231 CAGCCCCGACCCCGC 247
Db 1 CAGCCUCUGACCCCGC 17

RESULT 249
US-09-930-423-5/c
; Sequence 5, Application US/09930423
; Publication No. US20030092003A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Blatt, Larry
; APPLICANT: McSwiggen, Jim
; TITLE OF INVENTION: Method and Reagent for the Treatment of Alzheimer's Disease
; FILE REFERENCE: MBH00,918-A 400/027
; CURRENT APPLICATION NUMBER: US/09/930,423
; CURRENT FILING DATE: 2001-08-15
; NUMBER OF SEQ ID NOS: 4553
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 5
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo Sapiens
US-09-930-423-5

Query Match 3.1%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 2.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 15 GGGCCTGGGAGGGGTG 31
Db 17 GGGGCTGGGAGGGGCG 1

RESULT 250
US-09-930-423-336/c
; Sequence 336, Application US/09930423
; Publication No. US20030092003A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Blatt, Larry
; APPLICANT: McSwiggen, Jim
; TITLE OF INVENTION: Method and Reagent for the Treatment of Alzheimer's Disease
; FILE REFERENCE: MBH00,918-A 400/027
; CURRENT APPLICATION NUMBER: US/09/930,423
```

```
; CURRENT FILING DATE: 2001-08-15
; NUMBER OF SEQ ID NOS: 4553
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 336
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo Sapiens
US-09-930-423-336

Query Match 3.1%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 2.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 12 GGTGGCCCTGGGAGGGG 28
Db 17 GCGGGGCTGGGAGGGG 1

RESULT 251
US-09-930-423-1471
; Sequence 1471, Application US/09930423
; Publication No. US20030092003A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Blatt, Larry
; APPLICANT: McSwiggen, Jim
; TITLE OF INVENTION: Method and Reagent for the Treatment of Alzheimer's Disease
; FILE REFERENCE: MBH00,918-A 400/027
; CURRENT APPLICATION NUMBER: US/09/930,423
; CURRENT FILING DATE: 2001-08-15
; NUMBER OF SEQ ID NOS: 4553
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1471
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo Sapiens
US-09-930-423-1471

Query Match 3.1%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 2.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 242 CCCGCCCTGGAGCGCG 258
Db 1 CCGCGCGGAGCGCGC 17

RESULT 252
US-09-930-423-1472
; Sequence 1472, Application US/09930423
; Publication No. US20030092003A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Blatt, Larry
; APPLICANT: McSwiggen, Jim
; TITLE OF INVENTION: Method and Reagent for the Treatment of Alzheimer's Disease
; FILE REFERENCE: MBH00,918-A 400/027
; CURRENT APPLICATION NUMBER: US/09/930,423
; CURRENT FILING DATE: 2001-08-15
; NUMBER OF SEQ ID NOS: 4553
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1472
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo Sapiens
US-09-930-423-1472

Query Match 3.1%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 2.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 243 CCCGCCCTGGAGCGCG 259
Db 1 CCGCGCGGAGCGCGC 17
```



```
Db      1 CCCCGCGGAGCCCGCG 17

RESULT 253
US-09-827-395A-630
; Sequence 630, Application US/09827395A
; Publication No. US20030113891A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Lawrence Blatt
; APPLICANT: James McSwiggen
; APPLICANT: Bharat Chowrira
; TITLE OF INVENTION: Method and Reagent for the Inhibition of NOGO and NOGO Receptor G
; FILE REFERENCE: MBHB00-878-C (400/017)
; CURRENT APPLICATION NUMBER: US/09/827,395A
; CURRENT FILING DATE: 2001-04-05
; PRIOR APPLICATION NUMBER: 09/780,533
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/181,797
; PRIOR FILING DATE: 2000-02-11
; NUMBER OF SEQ ID NOS: 2617
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 630
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-827-395A-630

Query Match      3.1%; Score 13.8; DB 1; Length 17;
Best Local Similarity 76.5%; Pred. No. 2.2e+02;
Matches 13; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy      263 GGCCCGGGCGCTTCGCC 279
Db      1 GGCCCGGGCGGUGUCCG 17

RESULT 254
US-09-740-332-800
; Sequence 800, Application US/09740332
; Publication No. US20030125270A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related
; FILE REFERENCE: Hepatitis C Virus Infection
; FILE REFERENCE: RPI 400/003
; CURRENT APPLICATION NUMBER: US/09/740,332
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9704
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 800
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-740-332-800

Query Match      3.1%; Score 13.8; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.2e+02;
Matches 14; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy      432 AGGACTCGGCTCACACA 448
Db      1 AGGACUGGGCCACACA 17

RESULT 255
US-09-740-332-3130/c
; Sequence 3130, Application US/09740332
; Publication No. US20030125270A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Von Carlowitz, Ira
; APPLICANT: McSwiggen, Jim
; APPLICANT: Hamblin, Paul
; TITLE OF INVENTION: Method and Reagent for the Inhibition of Grb-2-related with Insert
```

```
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related
; FILE REFERENCE: Hepatitis C Virus Infection
; FILE REFERENCE: RPI 400/003
; CURRENT APPLICATION NUMBER: US/09/740,332
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9704
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3130
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-740-332-3130

Query Match      3.1%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 2.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      20 TGGGAGGGTGGTGGCC 36
Db      17 TGGGAGGGTGGTGGCC 1

RESULT 256
US-09-792-818-129/c
; Sequence 129, Application US/09792818
; Publication No. US20030134806A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Jarvis, Thale
; APPLICANT: Von Carlowitz, Ira
; APPLICANT: McSwiggen, Jim
; APPLICANT: Hamblin, Paul
; APPLICANT: Ellis, Jonathan
; TITLE OF INVENTION: Method and Reagent for the Inhibition of Grb-2-related with Insert
; FILE REFERENCE: MBHB00-901-A (400/013)
; CURRENT APPLICATION NUMBER: US/09/792,818
; CURRENT FILING DATE: 2001-02-23
; NUMBER OF SEQ ID NOS: 2304
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 129
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-792-818-129

Query Match      3.1%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 2.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      201 CTCCTGGGACCTCCGG 217
Db      17 CTCCTGGGACCTCCGG 1

RESULT 257
US-09-792-818-330/c
; Sequence 330, Application US/09792818
; Publication No. US20030134806A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Jarvis, Thale
; APPLICANT: Von Carlowitz, Ira
; APPLICANT: McSwiggen, Jim
; APPLICANT: Hamblin, Paul
; APPLICANT: Ellis, Jonathan
; TITLE OF INVENTION: Method and Reagent for the Inhibition of Grb-2-related with Insert
```

```

; TITLE OF INVENTION: (GRID) Gene
; FILE REFERENCE: MSHB00-901-A (400/013)
; CURRENT APPLICATION NUMBER: US-09/792,818
; CURRENT FILING DATE: 2001-02-23
; NUMBER OF SEQ ID NOS: 2304
; SOFTWARE: Patentin version 3.0
; SEQ ID NO 330
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-792-818-330

```

Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 200 CCTCCCGGGGACCTGCG 216  
|||  
Db 17 CCTCCCTGGGACCTCCG 1

```

RESULT 258
; US-09-237A-5/c
; Sequence 5, Application US/09/745237A
; Publication No. US20030143708A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Blatt, Larry
; APPLICANT: McSwigen, Jim
; TITLE OF INVENTION: Method and Reagent fo
; FILE REFERENCE: 400/007 (MBH800-918-A)
; CURRENT APPLICATION NUMBER: US/09/745,237
; CURRENT FILING DATE: 2002-04-15
; NUMBER OF SEQ ID NOS: 4550
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 5
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
; US-09-745-237A-5

```

Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 98.2%; Pred. No. 2.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy            15 GGGCCTGGAGGGGTGG 31  
             ||| ||| ||| ||| ||| ||| |||  
Db            17 GGGGCTGGGAGGGGCGG 1

```

RESULT 259
US-09-745-237A-336/c
/ Sequence 336, Application US/09745237A
/ Publication No. US20030143708A1
/ GENERAL INFORMATION:
/ APPLICANT: Ribozyme Pharmaceuticals,
/ APPLICANT: Blatt, Larry
/ APPLICANT: McSwiggen, Jim
/ TITLE OF INVENTION: Method and Reagent
/ FILE REFERENCE: 400/007 (MBH800-918-A)
/ CURRENT APPLICATION NUMBER: US/09/745
/ CURRENT FILING DATE: 2002-04-15
/ NUMBER OF SEQ ID NOS: 4550
/ SOFTWARE: Patentin version 3.0
/ SEQ ID NO 336
/ LENGTH: 17
/ TYPE: RNA
/ ORGANISM: Homo sapiens
US-09-745-237A-136

```

Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 98.2%; Pred. No. 2.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels

```

QY      12 GGTGGGCTGGAGGGG 28
|
|
Db      17 GCGGGGGCTGGAGGGG 1
|
|
RESULT 260
US-09-745-237A-1471
; Sequence 1471, Application US/09745237A
; Publication No. US20030143708A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Blatt, Larry
; APPLICANT: McSwiggen, Jim
; TITLE OF INVENTION: Method and Reagent for
; FILE REFERENCE: 400/007 (MBHB00-918-A)
; CURRENT APPLICATION NUMBER: US/09/745,237A
; CURRENT FILING DATE: 2002-04-15
; NUMBER OF SEQ ID NOS: 4550
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1471
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-745-237A-1471

```

Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY		242	CCCCGCTGGAGGCCGC	258
Db		1	CCCCGCCGGAGCCCGC	17

RESULT 261

```

US-09-745-237A-1472
; Sequence 1472, Application US/09745237A
; Publication No. US20030143708A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Blatt, Larry
; APPLICANT: McSwigen, Jim
; TITLE OF INVENTION: Method and Reagent for
; FILE REFERENCE: 400/007 (MBH900-918-A)
; CURRENT APPLICATION NUMBER: US/09/745,237
; CURRENT FILING DATE: 2002-04-15
; NUMBER OF SEQ ID NOS: 4550
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1472
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-745-237A-1472

```

Query Match	3.1%;	Score 13.8;	DB 1;	Length 17;
Best Local Similarity	88.2%;	Pred. No. 2.2e+02;		
Matches 15;	Conservative	0;	Mismatches 2;	Indels

QY 243 CCCGCTGGAGGCGCG 259  
|||  
Db 1 CCCGCCGGAGCCCGCG 17

RESULT 262  
US-09-817-879-800  
; Sequence 800, Application US/09817879  
; Publication No. US200301731A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals  
; TITLE OF INVENTION: Enzymatic Nucleic  
; TITLE OF INVENTION: Hepatitis C Vir  
; FILE REFERENCE: MEHQ00-801-F

; CURRENT APPLICATION NUMBER: US/09/817,879  
; CURRENT FILING DATE: 2001-03-26  
; NUMBER OF SEQ ID NOS: 9703  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 800  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: artificial sequence  
; FEATURE:  
; NAME/KEY: misc\_feature  
; LOCATION:  
; OTHER INFORMATION: oligonucleotide substrate  
US-09-817-879-800

Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 82.4%; Pred. No. 2.2e+02;  
Matches 14; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 432 AGGACTCGGTCACACA 448  
Db 1 AGGACUGGGCCACACA 17  
|||||: ||| |||||

## RESULT 263

US-09-817-879-3130/c  
; Sequence 3130, Application US/09817879  
; Publication No. US2003017311A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.

; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Hepatitis C Virus Infection  
; FILE REFERENCE: MHBB00-801-F  
; CURRENT APPLICATION NUMBER: US/09/817,879  
; CURRENT FILING DATE: 2001-03-26  
; NUMBER OF SEQ ID NOS: 9703  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 3130  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: artificial sequence  
; FEATURE:  
; NAME/KEY: misc\_feature  
; LOCATION:  
; OTHER INFORMATION: oligonucleotide substrate  
US-09-817-879-3130

Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 20 TGGGAGGGTGGTGCC 36  
Db 17 TGGGAGGGTGGTGCC 1  
|||||: ||| |||||

## RESULT 264

US-10-156-306-5871  
; Sequence 5871, Application US/10156306  
; Publication No. US20030119017A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.

; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Hepatitis C Virus Infection  
; FILE REFERENCE: MHBB01-664-A (400/050)  
; CURRENT APPLICATION NUMBER: US/10/156,306  
; CURRENT FILING DATE: 2002-05-28  
; NUMBER OF SEQ ID NOS: 8013  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 5871  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens

## US-10-156-306-5871

Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 76.5%; Pred. No. 2.2e+02;  
Matches 13; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 246 GCGTGGAGCGCGGTC 262  
Db 1 GCGUGGAGCGCGGCUC 17  
||: |||||: ||

## RESULT 265

US-10-156-306-5872  
; Sequence 5872, Application US/10156306  
; Publication No. US20030119017A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.

; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Hepatitis C Virus Infection  
; FILE REFERENCE: MHBB01-664-A (400/050)  
; CURRENT APPLICATION NUMBER: US/10/156,306  
; CURRENT FILING DATE: 2002-05-28  
; NUMBER OF SEQ ID NOS: 8013  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 5872  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens

Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 76.5%; Pred. No. 2.2e+02;  
Matches 13; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 249 TGGAGCGCGGTCGCGC 265  
Db 1 UGGAGCGCGCGCCGC 17  
: |||||: ||

## RESULT 266

US-10-230-006-2217/c  
; Sequence 2217, Application US/10230006  
; Publication No. US20030191077A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.

; TITLE OF INVENTION: METHOD AND REAGENT FOR THE TREATMENT OF ASTHMA AND ALLERGIC CONDITIONS  
; FILE REFERENCE: 400/056 (MBHB01-1110)  
; CURRENT APPLICATION NUMBER: US/10/230,006  
; CURRENT FILING DATE: 2002-11-18  
; PRIOR APPLICATION NUMBER: US 60/315,315  
; PRIOR FILING DATE: 2001-08-28  
; NUMBER OF SEQ ID NOS: 2678  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 2217  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens

Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 96 CTGTTTTCCTCGCTGAC 112  
Db 17 CTGTTTTCCTCGCTGAC 1  
|||||: |||||

## RESULT 267

US-10-430-882-630

```
; Sequence 630, Application US/10430882
; Publication No. US20030203870A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Lawrence Blatt
; APPLICANT: James McSwiggen
; APPLICANT: Bharat Chowkiri
; APPLICANT: Peter Haebelri
; TITLE OF INVENTION: Method and Reagent for the Inhibition of NOGO and NOGO Receptor
; FILE REFERENCE: MBH00-878-H (400/112)
; CURRENT APPLICATION NUMBER: US/10/430,882
; PRIOR FILING DATE: 2003-05-06
; PRIOR APPLICATION NUMBER: 09/827,395
; PRIOR FILING DATE: 2001-04-05
; PRIOR APPLICATION NUMBER: 09/780,533
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: PCT/US01/04273
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/181,797
; PRIOR FILING DATE: 2000-02-11
; PRIOR APPLICATION NUMBER: PCT/US02/10512
; PRIOR FILING DATE: 2002-04-03
; NUMBER OF SEQ ID NOS: 2617
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 630
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-430-882-630

Query Match          3.1%; Score 13.8; DB 1; Length 17;
Best Local Similarity 76.5%; Pred. No. 2.2e+02;
Matches 13; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 263 GGCCCGGGGGCTTCTCCG 279
Db 1 GGCCCGGGGGCGUUCG 17

RESULT 268
US-10-712-672-2726/c
; Sequence 2726, Application US/10712672
; Publication No. US20040102413A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Chowkiri, Bharat
; APPLICANT: McSwiggen, Jim
; TITLE OF INVENTION: Method and Reagent for the Inhibition of Telomerase Enzyme
; FILE REFERENCE: MBH00-882-C (400/019)
; CURRENT APPLICATION NUMBER: US/10/712,672
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US/09/653,225
; PRIOR FILING DATE: 2000-08-31
; PRIOR APPLICATION NUMBER: 60/197,769
; PRIOR FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/150,713
; PRIOR FILING DATE: 1999-08-31
; NUMBER OF SEQ ID NOS: 5586
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2726
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-712-672-2726

Query Match          3.1%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 2.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 124 GGAAAGCCTCGGCCCTG 140
Db 17 GGAAAGCCTCGGCCCTG 1
```

```
RESULT 269
US-10-669-841-3393
; Sequence 3393, Application US/10669841
; Publication No. US20040127446A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: Lawrence, Blatt
; APPLICANT: Dennis, Macejak
; APPLICANT: James, McSwiggen
; APPLICANT: David, Morrissey
; APPLICANT: Pamela, Pavco
; APPLICANT: Patricia, Lee
; APPLICANT: Kenneth, Draper
; APPLICANT: Elisabeth, Roberts
; TITLE OF INVENTION: OLIGONUCLEOTIDE MEDIATED INHIBITION OF HEPATITIS B VIRUS AND HEPAT
; FILE REFERENCE: 400/042US (MBH02-249-E)
; CURRENT APPLICATION NUMBER: US/10/669,841
; CURRENT FILING DATE: 2003-09-23
; PRIOR APPLICATION NUMBER: PCT/US02/09187
; PRIOR FILING DATE: 2002-03-26
; PRIOR APPLICATION NUMBER: US 60/296,876
; PRIOR FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: US 60/335,059
; PRIOR FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: US 60/337,055
; PRIOR FILING DATE: 2001-12-05
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 60/363,124
; PRIOR FILING DATE: 2002-03-11
; PRIOR APPLICATION NUMBER: US 09/817,879
; PRIOR FILING DATE: 2001-03-26
; PRIOR APPLICATION NUMBER: US 09/740,332
; PRIOR FILING DATE: 2000-12-18
; PRIOR APPLICATION NUMBER: US 09/611,931
; PRIOR FILING DATE: 2000-07-07
; PRIOR APPLICATION NUMBER: US 09/504,321
; PRIOR FILING DATE: 2000-02-15
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 16207
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3393
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-10-669-841-3393

Query Match          3.1%; Score 13.8; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.2e+02;
Matches 14; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 432 AGGACTCGGCTCACA 448
Db 1 AGGACUGGCCCCACACA 17

RESULT 270
US-10-669-841-5723/c
; Sequence 5723, Application US/10669841
; Publication No. US20040127446A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: Lawrence, Blatt
; APPLICANT: Dennis, Macejak
```

APPLICANT: James, McSwiggen  
APPLICANT: David, Morrissey  
APPLICANT: Pamela, Pavco  
APPLICANT: Patricia, Lee  
APPLICANT: Kenneth, Draper  
APPLICANT: Elisabeth, Roberts  
TITLE OF INVENTION: OLIGONUCLEOTIDE MEDIATED INHIBITION OF HEPATITIS B VIRUS AND HEPA  
FILE REFERENCE: 400/042US (MEHB02-249-E)  
CURRENT APPLICATION NUMBER: US/10/669,841  
CURRENT FILING DATE: 2003-09-23  
PRIOR APPLICATION NUMBER: PCT/US02/09187  
PRIOR FILING DATE: 2002-03-26  
PRIOR APPLICATION NUMBER: US 60/296,876  
PRIOR FILING DATE: 2001-06-08  
PRIOR APPLICATION NUMBER: US 60/335,059  
PRIOR FILING DATE: 2001-10-24  
PRIOR APPLICATION NUMBER: US 60/337,055  
PRIOR FILING DATE: 2001-12-05  
PRIOR APPLICATION NUMBER: US 60/358,580  
PRIOR FILING DATE: 2002-02-20  
PRIOR APPLICATION NUMBER: US 60/363,124  
PRIOR FILING DATE: 2002-03-11  
PRIOR APPLICATION NUMBER: US 09/817,879  
PRIOR FILING DATE: 2001-03-26  
PRIOR APPLICATION NUMBER: US 09/740,332  
PRIOR FILING DATE: 2000-12-18  
PRIOR APPLICATION NUMBER: US 09/611,931  
PRIOR FILING DATE: 2000-07-07  
PRIOR APPLICATION NUMBER: US 09/504,321  
PRIOR FILING DATE: 2000-02-15  
Remaining Prior Application data removed - See File Wrapper or PALM.  
NUMBER OF SEQ ID NOS: 16207  
SOFTWARE: PatentIn version 3.0  
SEQ ID NO 5723  
LENGTH: 17  
TYPE: RNA  
ORGANISM: Artificial Sequence  
FEATURE:  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION:  
OTHER INFORMATION: oligonucleotide substrate  
US-10-669-841-5723

Query Match 3.1%; Score 13.8; DB 1; Length 17;  
Best Local Similarity 88.2%; Pred. No. 2.2e+02;  
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 20 TGGGAGGGGTGGTGCC 36  
Db 17 TGGGAGGGGTGGTGCC 1

RESULT 271  
US-09-961-077-571  
Sequence 571, Application US/09961077  
Publication No. US20030014775A1  
GENERAL INFORMATION:  
APPLICANT: Zwick, Michael G.  
Edington, Brent E.  
McSwiggen, James A.  
Merlo, Patricia Ann Owens  
Guo, Lining  
Skokut, Thomas A.  
Young, Scott A.  
Folkerts, Otto  
Merlo, Donald J.  
TITLE OF INVENTION: COMPOSITION AND METHODS FOR  
MODULATION OF GENE EXPRESSION  
IN PLANTS  
NUMBER OF SEQUENCES: 1263

CORRESPONDENCE ADDRESS:  
ADDRESSEE: Lyon & Lyon  
STREET: 633 West Fifth Street  
Suite 4700  
CITY: Los Angeles  
STATE: California  
COUNTRY: U.S.A.  
ZIP: 90071-2066  
COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5" Diskette, 1.44 MB  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: IBM P.C. DOS 5.0  
SOFTWARE: Word Perfect 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/961,077  
FILING DATE: 21-Sep-2001  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/679,645  
FILING DATE: July 12, 1996  
APPLICATION NUMBER: 60/001,135  
FILING DATE: July 13, 1995  
APPLICATION NUMBER: 08/300,726  
FILING DATE: September 2, 1994  
ATTORNEY/AGENT INFORMATION:  
NAME: Warburg, Richard J.  
REGISTRATION NUMBER: 32,327  
REFERENCE/DOCKET NUMBER: 219/247  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (213) 489-1600  
TELEFAX: (213) 955-0440  
TELEX: 67-3510  
INFORMATION FOR SEQ ID NO: 571:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 18 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
SEQUENCE DESCRIPTION: SEQ ID NO: 571:  
US-09-961-077-571

Query Match 3.1%; Score 13.8; DB 1; Length 18;  
Best Local Similarity 82.4%; Pred. No. 2.4e+02;  
Matches 14; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 134 CGGCTGCGCGCTTCCA 150  
Db 2 CGGCCUGCGCGCGCCA 18

RESULT 272  
US-10-158-160A-27/c  
Sequence 27, Application US/10158160A  
Publication No. US20030059805A1  
GENERAL INFORMATION:  
APPLICANT: RAPPOLD-HOERBRAND, GUDRUN  
TITLE OF INVENTION: HUMAN GROWTH GENE AND SHORT STATURE GENE REGION  
FILE REFERENCE: 108351-00004  
CURRENT APPLICATION NUMBER: US/10/158,160A  
CURRENT FILING DATE: 2002-08-20  
PRIOR APPLICATION NUMBER: 09/147,699  
PRIOR FILING DATE: 1999-06-24  
PRIOR APPLICATION NUMBER: PCT/EP97/05355  
PRIOR FILING DATE: 1997-09-29  
PRIOR APPLICATION NUMBER: 60/027,633  
PRIOR FILING DATE: 1996-10-01  
PRIOR APPLICATION NUMBER: EP/97100583.0  
NUMBER OF SEQ ID NOS: 55  
SOFTWARE: PatentIn ver. 2.1  
SEQ ID NO 27

```
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic
US-10-158-160A-27

Query Match
Best Local Similarity 3.1%; Score 13.8; DB 1; Length 18;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 332 CGGGGGCGAGCGGCGAGG 348
Db 17 CGGGGGCGGGCGGCGGG 1

RESULT 273
US-09-864-785-1488
; Sequence 1488, Application US/09864785
; Patent No. US20020177568A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Stinchcomb, Dan
; APPLICANT: Draper, Ken
; TITLE OF INVENTION: McSwiggen, Jim
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related
; FILE REFERENCE: Levels of NF-Kappa B
; FILE REFERENCE: 400/022 (MHB00-812-D)
; CURRENT APPLICATION NUMBER: US/09/864,785
; CURRENT FILING DATE: 2001-05-23
; NUMBER OF SEQ ID NOS: 3929
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1488
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid
US-09-864-785-1488

Query Match
Best Local Similarity 3.0%; Score 13.4; DB 1; Length 17;
Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 132 CTCGGCCTGCCGCCT 146
Db 1 CUCCGCCUGCGCCU 15

RESULT 274
US-09-740-332-917
; Sequence 917, Application US/09740332
; Publication No. US20030125270A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related
; TITLE OF INVENTION: Hepatitis C Virus Infection
; FILE REFERENCE: RPI 400/003
; CURRENT APPLICATION NUMBER: US/09/740,332
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9704
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 917
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-740-332-917
```

```
Query Match
Best Local Similarity 3.0%; Score 13.4; DB 1; Length 17;
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 210 ACCTGCGCGGGTCTG 224
Db 2 ACCUGCGCGGCGUCG 16

RESULT 275
US-09-740-332-3638/c
; Sequence 3638, Application US/09740332
; Publication No. US20030125270A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related
; FILE REFERENCE: RPI 400/003
; CURRENT APPLICATION NUMBER: US/09/740,332
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9704
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3638
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-740-332-3638

Query Match
Best Local Similarity 3.0%; Score 13.4; DB 1; Length 17;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 210 ACCTGCGCGGGTCTG 224
Db 17 ACCTGCGCGGCTCG 3

RESULT 276
US-09-792-818-429/c
; Sequence 429, Application US/09792818
; Publication No. US20030134806A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Jarvis, Thale
; APPLICANT: Von Carlowitz, Ira
; APPLICANT: McSwiggen, Jim
; APPLICANT: Hamblin, Paul
; APPLICANT: Ellis, Jonathan
; TITLE OF INVENTION: Method and Reagent for the Inhibition of Grb-2-related with Insert
; TITLE OF INVENTION: (GRID) Gene
; FILE REFERENCE: MHB00-901-A (400/013)
; CURRENT APPLICATION NUMBER: US/09/792,818
; CURRENT FILING DATE: 2001-02-23
; NUMBER OF SEQ ID NOS: 2304
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 429
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-792-818-429

Query Match
Best Local Similarity 3.0%; Score 13.4; DB 1; Length 17;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 132 CTCGGCCTGCCGCCT 146
Db 16 CTCGCCCTGCCGCCT 2
```

```
RESULT 277
US-09-792-818-857/c
; Sequence 857, Application US/09792818
; Publication No. US20030134806A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Jarvis, Thale
; APPLICANT: Von Carlowitz, Ira
; APPLICANT: McSwiggen, Jim
; APPLICANT: Hamblin, Paul
; APPLICANT: Ellis, Jonathan
; TITLE OF INVENTION: Method and Reagent for the Inhibition of Grb-2-related with Inse
; TITLE OF INVENTION: (GRID) Gene
; FILE REFERENCE: MBH00-901-A (400/013)
; CURRENT APPLICATION NUMBER: US/09/792,818
; CURRENT FILING DATE: 2001-02-23
; NUMBER OF SEQ ID NOS: 2304
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 857
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-792-818-857

Query Match          3.0%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.4e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 132 CTCGGCCTGCCGCT 146
DB 15 CTCGGCCTGCCGCT 1

RESULT 278
US-09-817-879-917
; Sequence 917, Application US/09817879
; Publication No. US2003017131A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Relate
; TITLE OF INVENTION: Hepatitis C Virus Infection
; FILE REFERENCE: MBH00-801-F
; CURRENT APPLICATION NUMBER: US/09/817,879
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9703
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 917
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-817-879-917

Query Match          3.0%; Score 13.4; DB 1; Length 17;
Best Local Similarity 80.0%; Pred. No. 2.4e+02;
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 210 ACCTCGCGCGGTCTG 224
DB 2 ACCUGCGCGGCGUCG 16

RESULT 279
US-09-817-879-3638/c
; Sequence 3638, Application US/09817879
; Publication No. US2003017131A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Relate
```

```
; TITLE OF INVENTION: Hepatitis C Virus Infection
; FILE REFERENCE: MBH00-801-F
; CURRENT APPLICATION NUMBER: US/09/817,879
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9703
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3638
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-817-879-3638

Query Match          3.0%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.4e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 210 ACCTCGCGCGGTCTG 224
DB 17 ACCTCGCGCGGTCTG 3

RESULT 280
US-10-232-634-11
; Sequence 11, Application US/10232634
; Publication No. US20030105314A1
; GENERAL INFORMATION:
; APPLICANT: Guida, Marco
; APPLICANT: Hall, Jeff
; TITLE OF INVENTION: GENETIC TYPING OF THE HUMAN CYTOCHROME P450 2A6 GENE
; FILE REFERENCE: 4389-20
; CURRENT APPLICATION NUMBER: US/10/232,634
; CURRENT FILING DATE: 2002-08-30
; PRIOR APPLICATION NUMBER: US/09/586,376
; PRIOR FILING DATE: 2000-06-02
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 11
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-232-634-11

Query Match          3.0%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.4e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 41 TTTGCTTAACCTAA 55
DB 3 TTTGCTTAACCTAA 17

RESULT 281
US-10-232-634-12
; Sequence 12, Application US/10232634
; Publication No. US20030105314A1
; GENERAL INFORMATION:
; APPLICANT: Guida, Marco
; APPLICANT: Hall, Jeff
; TITLE OF INVENTION: GENETIC TYPING OF THE HUMAN CYTOCHROME P450 2A6 GENE
; FILE REFERENCE: 4389-20
; CURRENT APPLICATION NUMBER: US/10/232,634
; CURRENT FILING DATE: 2002-08-30
; PRIOR APPLICATION NUMBER: US/09/586,376
; PRIOR FILING DATE: 2000-06-02
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 12
```

; LENGTH: 17  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-10-232-634-12

Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.4e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 41 TTGTCTAACCTTAA 55  
|||||  
Db 3 TTGTCTACCCCTAA 17

## RESULT 282

US-10-157-580A-27  
; Sequence 27, Application US/10157580A  
; Publication No. US20030124513A1  
; GENERAL INFORMATION:

; APPLICANT: Ribozyme Pharmaceuticals, Inc.

; APPLICANT: McSwiggen, Jim

; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Condi

; FILE OF INVENTION: Related To Levels Of HIV

; FILE REFERENCE: MBH01-665-A (400/051)

; CURRENT APPLICATION NUMBER: US/10/157,580A

; CURRENT FILING DATE: 2002-08-30

; NUMBER OF SEQ ID NOS: 170

; SOFTWARE: PatentIn version 3.0

; SEQ ID NO 27

; LENGTH: 17

; TYPE: RNA

; ORGANISM: Human immunodeficiency virus

US-10-157-580A-27

Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 80.0%; Pred. No. 2.4e+02;  
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 428 ACCGAGGACTCGGCT 442  
|||  
Db 2 ACCGAGGACUCGGCU 16

## RESULT 283

US-10-157-580A-38  
; Sequence 38, Application US/10157580A  
; Publication No. US20030124513A1  
; GENERAL INFORMATION:

; APPLICANT: Ribozyme Pharmaceuticals, Inc.

; APPLICANT: McSwiggen, Jim

; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Condi

; FILE OF INVENTION: Related To Levels Of HIV

; FILE REFERENCE: MBH01-665-A (400/051)

; CURRENT APPLICATION NUMBER: US/10/157,580A

; CURRENT FILING DATE: 2002-08-30

; NUMBER OF SEQ ID NOS: 170

; SOFTWARE: PatentIn version 3.0

; SEQ ID NO 38

; LENGTH: 17

; TYPE: RNA

; ORGANISM: Human immunodeficiency virus

US-10-157-580A-38

Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 80.0%; Pred. No. 2.4e+02;  
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 428 ACCGAGGACTCGGCT 442  
|||  
Db 3 ACCGAGGACUCGGCU 17

## RESULT 284

US-10-157-580A-68  
; Sequence 68, Application US/10157580A  
; Publication No. US20030124513A1  
; GENERAL INFORMATION:

; APPLICANT: Ribozyme Pharmaceuticals, Inc.

; APPLICANT: McSwiggen, Jim

; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Condi

; FILE OF INVENTION: Related To Levels Of HIV

; FILE REFERENCE: MBH01-665-A (400/051)

; CURRENT APPLICATION NUMBER: US/10/157,580A

; CURRENT FILING DATE: 2002-08-30

; NUMBER OF SEQ ID NOS: 170

; SOFTWARE: PatentIn version 3.0

; SEQ ID NO 68

; LENGTH: 17

; TYPE: RNA

; ORGANISM: Homo sapiens

US-10-138-674-4559

Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 86.7%; Pred. No. 2.4e+02;  
Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 164 AGCAAGCAAAAAAATG 178  
|||||  
Db 2 AGCAAGCAAAAAAUG 16

## RESULT 286

US-10-138-674-7501/c  
; Sequence 7501, Application US/10138674  
; Publication No. US20040077565A1  
; GENERAL INFORMATION:

; APPLICANT: Ribozyme Pharmaceuticals, Inc.

; APPLICANT: Pavco, Pam

; APPLICANT: McSwiggen, Jim

; APPLICANT: Stinchcomb, Dan

; APPLICANT: Escobedo, Jaime

; TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Rel

; FILE REFERENCE: MBH00-876-N (400/049)



```

; SEQ ID NO 7501
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-287-949A-7501

```

```

; CURRENT APPLICATION NUMBER: US/10/287,949A
; CURRENT FILING DATE: 2003-04-11
; NUMBER OF SEQ ID NOS: 20822
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 7501
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-287-949A-7501

```

```

Query Match          3.0%; Score 13.4; DB 1; Length 17;
Best Local Similarity 80.0%; Pred. NO. 2.4e+02;
Matches 12: Conservative 2; Mismatches 1; Indels 0; Gaps 0;

```

Qy 210 ACCTGCGGCGGGTGC 224  
|||:|||||:|  
pb 2 ACCUGCGGGGCGUCG 16

## RESULT 290

US-10-669-841-6231/c  
; Sequence 6231, Application US/10669841  
; Publication No. US20040127446A1  
; GENERAL INFORMATION:  
; APPLICANT: Sirna Therapeutics, Inc.  
; APPLICANT: Lawrence, Blatt  
; APPLICANT: Dennis, Macejak  
; APPLICANT: James, McSwiggen  
; APPLICANT: David, Morrissey  
; APPLICANT: Pamela, Favco  
; APPLICANT: Patrice, Lee  
; APPLICANT: Kenneth, Draper  
; APPLICANT: Elisabeth, Roberts  
; TITLE OF INVENTION: OLIGONUCLEOTIDE MEDIATED INHIBITION OF HEPATITIS B VIRUS AND HEPATITIS B VIRUS AND HEPATITIS B VIRUS  
; FILE REFERENCE: 400/042US (MBH02-249-E)  
; CURRENT APPLICATION NUMBER: US/10/669,841  
; CURRENT FILING DATE: 2003-09-23  
; PRIOR APPLICATION NUMBER: PCT/US02/09187  
; PRIOR FILING DATE: 2002-03-26  
; PRIOR APPLICATION NUMBER: US 60/296,876  
; PRIOR FILING DATE: 2001-06-08  
; PRIOR APPLICATION NUMBER: US 60/335,059  
; PRIOR FILING DATE: 2001-10-24  
; PRIOR APPLICATION NUMBER: US 60/337,055  
; PRIOR FILING DATE: 2001-12-05  
; PRIOR APPLICATION NUMBER: US 60/358,580  
; PRIOR FILING DATE: 2002-02-20  
; PRIOR APPLICATION NUMBER: US 60/363,124  
; PRIOR FILING DATE: 2002-03-11  
; PRIOR APPLICATION NUMBER: US 09/817,879  
; PRIOR FILING DATE: 2001-03-26  
; PRIOR APPLICATION NUMBER: US 09/740,332  
; PRIOR FILING DATE: 2000-12-18  
; PRIOR APPLICATION NUMBER: US 09/611,931  
; PRIOR FILING DATE: 2000-07-07  
; PRIOR APPLICATION NUMBER: US 09/504,321  
; PRIOR FILING DATE: 2000-02-15  
; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 16207  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 6231  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid  
; NAME/KEY: misc\_feature  
; LOCATION:  
; OTHER INFORMATION: oligonucleotide substrate  
US-10-669-841-6231

Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.4e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 210 ACCTGCGCGGGTGC 224  
Db 17 ACCTGCGCGGGTGC 3

## RESULT 291

US-10-712-633-490/c  
; Sequence 490, Application US/10712633  
; Publication No. US20040220128A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Pavco, Pamela  
; APPLICANT: Sandberg, Jennifer  
; APPLICANT: Gordon, Gilad  
; APPLICANT: McSwiggen, James

; APPLICANT: Stinchcomb, Dan  
; TITLE OF INVENTION: NUCLEIC ACID BASED MODULATION OF VASCULAR ENDOTHELIAL GROWTH FACTOR  
; FILE REFERENCE: MBH02-325PCT (400/047)  
; CURRENT APPLICATION NUMBER: US/10/712,633  
; CURRENT FILING DATE: 2003-11-13  
; PRIOR APPLICATION NUMBER: US 60/005,974  
; PRIOR FILING DATE: 1995-10-26  
; PRIOR APPLICATION NUMBER: US 08/584,040  
; PRIOR FILING DATE: 1996-01-08  
; PRIOR APPLICATION NUMBER: US 09/371,772  
; PRIOR FILING DATE: 1999-08-10  
; PRIOR APPLICATION NUMBER: US 09/708,690  
; PRIOR FILING DATE: 2000-11-07  
; PRIOR APPLICATION NUMBER: US 09/870,161  
; PRIOR FILING DATE: 2001-05-29  
; PRIOR APPLICATION NUMBER: US 60/334,461  
; PRIOR FILING DATE: 2001-11-30  
; PRIOR APPLICATION NUMBER: US 10/138,674  
; PRIOR FILING DATE: 2002-05-03  
; NUMBER OF SEQ ID NOS: 5989  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 490  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo Sapiens  
US-10-712-633-490

Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.4e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 30 GGTGGCCATTTTGTG 44  
Db 17 GATGGCCATTTTGTG 3

## RESULT 292

US-10-949-004-11  
; Sequence 11, Application US/10949004  
; Publication No. US20050064495A1  
; GENERAL INFORMATION:  
; APPLICANT: Guida, Marco  
; APPLICANT: Hall, Jeff  
; TITLE OF INVENTION: GENETIC TYPING OF THE HUMAN CYTOCHROME P450 2A6 GENE  
; OTHER INFORMATION: AND RELATED MATERIALS AND METHODS  
; FILE REFERENCE: DNA-20US2  
; CURRENT APPLICATION NUMBER: US/10/949,004  
; CURRENT FILING DATE: 2004-09-23  
; PRIOR APPLICATION NUMBER: 10/232,634  
; PRIOR FILING DATE: 2002-08-30  
; PRIOR APPLICATION NUMBER: 09/586,376  
; PRIOR FILING DATE: 2000-06-02  
; NUMBER OF SEQ ID NOS: 29  
; SOFTWARE: PatentIn Ver. 2.1 and text editor  
; SEQ ID NO 11  
; LENGTH: 17  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-10-949-004-11

Query Match 3.0%; Score 13.4; DB 1; Length 17;  
Best Local Similarity 93.3%; Pred. No. 2.4e+02;  
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 41 TTTGTCTAACCTAA 55  
Db 3 TTTGTCTTACCCTAA 17

## RESULT 293

US-10-949-004-12  
; Sequence 12, Application US/10949004

; Publication No. US20050064495A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Guida, Marco  
 ; APPLICANT: Hall, Jeff  
 ; TITLE OF INVENTION: GENETIC TYPING OF THE HUMAN CYTOCHROME P450 2A6 GENE  
 ; TITLE OF INVENTION: AND RELATED MATERIALS AND METHODS  
 ; FILE REFERENCE: DNA-20US2  
 ; CURRENT APPLICATION NUMBER: US/10/949,004  
 ; CURRENT FILING DATE: 2004-09-23  
 ; PRIOR APPLICATION NUMBER: 10/232,634  
 ; PRIOR FILING DATE: 2002-08-30  
 ; PRIOR APPLICATION NUMBER: 09/586,376  
 ; PRIOR FILING DATE: 2000-06-02  
 ; NUMBER OF SEQ ID NOS: 29  
 ; SOFTWARE: PatentIn ver. 2.1 and text editor  
 ; SEQ ID NO 12  
 ; LENGTH: 17  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens  
 US-10-949-004-12  
  
 Query Match 3.0%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 93.3%; Pred. No. 2.4e+02;  
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
  
 QY 41 TTTGTCTAACCCCTAA 55  
 ||||| |||||  
 DB 3 TTTGTCTCACCCCTAA 17  
  
 RESULT 294  
 US-10-724-270-6668  
 ; Sequence 6668, Application US/10724270  
 ; Publication No. US20050080031A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Sirna Therapeutics, Inc.  
 ; APPLICANT: McSwiggen, James  
 ; TITLE OF INVENTION: Nucleic Acid Treatment of Diseases or Conditions Related to Level  
 ; TITLE OF INVENTION: RAS, HER2 and HIV  
 ; FILE REFERENCE: 400/046-US (MBHB02-326-A)  
 ; CURRENT APPLICATION NUMBER: US/10/724,270  
 ; CURRENT FILING DATE: 2003-11-26  
 ; PRIOR APPLICATION NUMBER: PCT/US02/16840  
 ; PRIOR FILING DATE: 2002-05-29  
 ; PRIOR APPLICATION NUMBER: US 60/318,471  
 ; PRIOR FILING DATE: 2001-09-10  
 ; PRIOR APPLICATION NUMBER: US 60/296,249  
 ; PRIOR FILING DATE: 2001-06-06  
 ; PRIOR APPLICATION NUMBER: US 60/294,140  
 ; PRIOR FILING DATE: 2001-05-29  
 ; PRIOR APPLICATION NUMBER: US 10/238,700  
 ; PRIOR FILING DATE: 2002-09-10  
 ; PRIOR APPLICATION NUMBER: US 10/163,552  
 ; PRIOR FILING DATE: 2002-06-06  
 ; PRIOR APPLICATION NUMBER: US 10/157,580  
 ; PRIOR FILING DATE: 2002-05-29  
 ; PRIOR APPLICATION NUMBER: US 10/693,059  
 ; PRIOR FILING DATE: 2002-10-23  
 ; PRIOR APPLICATION NUMBER: US 10/444,853  
 ; PRIOR FILING DATE: 2003-05-23  
 ; PRIOR APPLICATION NUMBER: US 10/417,012  
 ; Remaining Prior Application data removed - See File Wrapper or PALM.  
 ; NUMBER OF SEQ ID NOS: 6810  
 ; SOFTWARE: PatentIn version 3.0  
 ; SEQ ID NO 6668  
 ; LENGTH: 17  
 ; TYPE: RNA  
 ; ORGANISM: Homo sapiens  
 US-10-724-270-6668  
  
 Query Match 3.0%; Score 13.4; DB 1; Length 17;  
 Best Local Similarity 80.0%; Pred. No. 2.4e+02;

Matches	12;	Conservative	2;	Mismatches	1;	Indels	0;	Gaps	0;
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Qy 428 ACCCAGGACTCGGCT 442  
 || |||||:||||  
 Db 2 ACCGAGGACUCGGCU 16

RESULT 295  
 US-10-724-270-6679  
 ; Sequence 6679, Application US/10724270  
 ; Publication No. US20050080031A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Sirna Therapeutics, Inc.  
 ; APPLICANT: McSwiggen, James  
 ; TITLE OF INVENTION: Nucleic Acid Treatment of Diseases or Conditions Related  
 ; TITLE OF INVENTION: RAS, HER2 and HIV  
 ; FILE REFERENCE: 400/046-US (MBHB02-326-A)  
 ; CURRENT APPLICATION NUMBER: US/10/724,270  
 ; CURRENT FILING DATE: 2003-11-26  
 ; PRIOR APPLICATION NUMBER: PCT/US02/16840  
 ; PRIOR FILING DATE: 2002-05-29  
 ; PRIOR APPLICATION NUMBER: US 60/318,471  
 ; PRIOR FILING DATE: 2001-09-10  
 ; PRIOR APPLICATION NUMBER: US 60/296,249  
 ; PRIOR FILING DATE: 2001-06-06  
 ; PRIOR APPLICATION NUMBER: US 60/294,140  
 ; PRIOR FILING DATE: 2001-05-29  
 ; PRIOR APPLICATION NUMBER: US 10/238,700  
 ; PRIOR FILING DATE: 2002-09-10  
 ; PRIOR APPLICATION NUMBER: US 10/163,552  
 ; PRIOR FILING DATE: 2002-06-06  
 ; PRIOR APPLICATION NUMBER: US 10/157,580  
 ; PRIOR FILING DATE: 2002-05-29  
 ; PRIOR APPLICATION NUMBER: US 10/693,059  
 ; PRIOR FILING DATE: 2002-10-23  
 ; PRIOR APPLICATION NUMBER: US 10/444,853  
 ; PRIOR FILING DATE: 2003-05-23  
 ; PRIOR APPLICATION NUMBER: US 10/417,012  
 ; PRIOR FILING DATE: 2003-04-16  
 ; Remaining Prior Application data removed - See File Wrapper or PALM.  
 ; NUMBER OF SEQ ID NOS: 6810  
 ; SOFTWARE: PatentIn version 3.0  
 ; SEQ ID NO 6679  
 ; LENGTH: 17  
 ; TYPE: RNA  
 ; ORGANISM: Homo sapiens  
 US-10-724-270-6679

Query Match	3.0%;	Score 13.4;	DB 1;	Length 17;
Best Local Similarity	80.0%;	Pred. No. 2.4e+02;		

Matches	12;	Conservative	2;	Mismatches	1;	Indels	0;	Gaps	0;
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Qy 428 ACCCAGGACTCGGCT 442  
 || |||||:||||  
 Db 3 ACCGAGGACUCGGCU 17

RESULT 296  
 US-10-724-270-6709  
 ; Sequence 6709, Application US/10724270  
 ; Publication No. US20050080031A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Sirna Therapeutics, Inc.  
 ; APPLICANT: McSwiggen, James  
 ; TITLE OF INVENTION: Nucleic Acid Treatment of Diseases or Conditions Related  
 ; TITLE OF INVENTION: RAS, HER2 and HIV  
 ; FILE REFERENCE: 400/046-US (MBHB02-326-A)  
 ; CURRENT APPLICATION NUMBER: US/10/724,270  
 ; CURRENT FILING DATE: 2003-11-26  
 ; PRIOR APPLICATION NUMBER: PCT/US02/16840  
 ; PRIOR FILING DATE: 2002-05-29  
 ; PRIOR APPLICATION NUMBER: US 60/318,471  
 ; PRIOR FILING DATE: 2001-09-10

```
; PRIOR APPLICATION NUMBER: US 60/296,249
; PRIOR FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: US 60/294,140
; PRIOR FILING DATE: 2001-05-29
; PRIOR APPLICATION NUMBER: US 10/238,700
; PRIOR FILING DATE: 2002-09-10
; PRIOR APPLICATION NUMBER: US 10/163,552
; PRIOR FILING DATE: 2002-06-06
; PRIOR APPLICATION NUMBER: US 10/157,580
; PRIOR FILING DATE: 2002-05-29
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: US 10/417,012
; PRIOR FILING DATE: 2003-04-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 6810
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 6709
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-724-270-6709

Query Match      3.0%; Score 13.4; DB 1; Length 17;
Best Local Similarity 80.0%; Pred. No. 2.4e+02;
Matches 12; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 428 ACCGAGCAGCTCGGCT 442
Db 1 ACCGAGCAGCUCGGCU 15

RESULT 297
US-911-318-41
; Sequence 41, Application US/10911318
; Publication No. US20050130186A1
; GENERAL INFORMATION:
; APPLICANT: We Gene Technologies, Inc.
; TITLE OF INVENTION: MENINGITIS DETECTION CHIP AND FABRICATION METHOD THEREOF AND
; TITLE OF INVENTION: METHOD OF DETECTING MENINGITIS AND PRIMER SET FOR MENINGITIS
; TITLE OF INVENTION: DETECTION
; FILE REFERENCE: 123333-US-PA
; CURRENT APPLICATION NUMBER: US/10/911,318
; PRIOR FILING DATE: 2004-08-03
; PRIOR APPLICATION NUMBER: TW 92135134
; PRIOR FILING DATE: 2003-12-12
; NUMBER OF SEQ ID NOS: 134
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 41
; LENGTH: 17
; TYPE: DNA
; ORGANISM: artificial sequence
; FEATURE:
; OTHER INFORMATION: Probe
US-10-911-318-41

Query Match      3.0%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.4e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 208 GGACCTGCGCGGGT 222
Db 2 GGACCTGCGGTGGT 16

RESULT 298
US-09-893-252-4/c
; Sequence 4, Application US/09893252
; Publication No. US20030012755A1
; GENERAL INFORMATION:
; APPLICANT: Styczynski, Peter
```

```
; APPLICANT: Ahluwalia, Gurpreet S.
; TITLE OF INVENTION: REDUCTION OF HAIR GROWTH
; FILE REFERENCE: 00216-552001
; CURRENT APPLICATION NUMBER: US/09/893,252
; CURRENT FILING DATE: 2001-10-12
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 13
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-893-252-4

Query Match      2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.5e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTG 58
Db 13 CTAACCCCTAACTG 1

RESULT 299
US-10-038-335-1/c
; Sequence 1, Application US/10038335
; Publication No. US20030096776A1
; GENERAL INFORMATION:
; APPLICANT: Ecker, David J.
; APPLICANT: Wyatt, Jacqueline
; APPLICANT: Bennett, C. Frank
; APPLICANT: Hanecak, Ronnie
; APPLICANT: Brown-Driver, Vickie
; APPLICANT: Vickers, Timothy
; APPLICANT: Chiang, Ming-Yi
; APPLICANT: Anderson, Kevin
; TITLE OF INVENTION: Modulation Of Telomere Length By Oligonucleotides Having A G-Core
; FILE REFERENCE: ISIS-4976
; CURRENT APPLICATION NUMBER: US/10/038,335
; CURRENT FILING DATE: 2001-01-02
; PRIOR APPLICATION NUMBER: 09/299,058
; PRIOR FILING DATE: 1999-04-23
; PRIOR APPLICATION NUMBER: 08/403,888
; PRIOR FILING DATE: 1995-06-12
; PRIOR APPLICATION NUMBER: PCT/US93/09297
; PRIOR FILING DATE: 1993-09-29
; PRIOR APPLICATION NUMBER: 07/954,185
; PRIOR FILING DATE: 1992-09-29
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
; LENGTH: 13
; TYPE: DNA
; ORGANISM: No. US20030096776A1el sequence
; FEATURE:
; OTHER INFORMATION: Antisense sequence
US-10-038-335-1

Query Match      2.9%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.5e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCCCTAACTG 58
Db 13 CTAACCCCTAACTG 1

RESULT 300
US-10-038-335-2/c
; Sequence 2, Application US/10038335
; Publication No. US20030096776A1
; GENERAL INFORMATION:
; APPLICANT: Ecker, David J.
```

APPLICANT: Wyatt, Jacqueline  
APPLICANT: Bennett, C. Frank  
APPLICANT: Hanecak, Ronnie  
APPLICANT: Brown-Driver, Vickie  
APPLICANT: Vickers, Timothy  
APPLICANT: Chiang, Ming-yi  
APPLICANT: Anderson, Kevin  
TITLE OF INVENTION: Modulation of Telomere Length By Oligonucleotides Having A G-Core  
FILE REFERENCE: ISIS-4976  
CURRENT APPLICATION NUMBER: US/10/038,335  
PRIOR FILING DATE: 2001-01-02  
PRIOR APPLICATION NUMBER: 09/299,058  
PRIOR FILING DATE: 1999-04-23  
PRIOR APPLICATION NUMBER: 08/403,888  
PRIOR FILING DATE: 1995-06-12  
PRIOR APPLICATION NUMBER: PCT/US93/09297  
PRIOR FILING DATE: 1993-09-29  
PRIOR APPLICATION NUMBER: 07/954,185  
PRIOR FILING DATE: 1992-09-29  
NUMBER OF SEQ ID NOS: 10  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 2  
LENGTH: 13  
TYPE: DNA  
ORGANISM: No. US20030096776A1el sequence  
FEATURE:  
OTHER INFORMATION: Antisense sequence  
US-10-038-335-2

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 46 CTAACCCCTAACTG 58  
|||||

Db 13 CTAACCCCTAACTG 1

RESULT 301  
US-10-255-535-3/c  
Sequence 3, Application US/10255535  
Publication No. US20030138814A1  
GENERAL INFORMATION:  
APPLICANT: Geron Corporation  
APPLICANT: Gryaznov, Sergei  
APPLICANT: Pongracz, Kristina  
APPLICANT: Tolman, Richard L.  
APPLICANT: Morin, Gregg B.  
TITLE OF INVENTION: Oligonucleotide Conjugates  
FILE REFERENCE: 072/002P  
CURRENT APPLICATION NUMBER: US/10/255,535  
CURRENT FILING DATE: 2002-09-25  
PRIOR APPLICATION NUMBER: PCT/US02/09138  
PRIOR FILING DATE: 2002-03-21  
PRIOR APPLICATION NUMBER: US 60/278,322  
PRIOR FILING DATE: 2001-03-23  
NUMBER OF SEQ ID NOS: 19  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 3  
LENGTH: 13  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: oligonucleotide  
US-10-255-535-3

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGCTTAACCCCTA 54  
|||||

Db 13 TTGCTTAACCCCTA 1  
RESULT 302  
US-10-463-076-2/c  
Sequence 2, Application US/10463076  
Publication No. US20030212032A1  
GENERAL INFORMATION:  
APPLICANT: Geron Corporation  
APPLICANT: Gryaznov, Sergei  
APPLICANT: Pongracz, Kristina  
APPLICANT: Matray, Tracey  
TITLE OF INVENTION: Oligonucleotide N3'-->P5' Thiophosphoramidates: Their Synthesis  
FILE REFERENCE: 039/004C  
CURRENT APPLICATION NUMBER: US/10/463,076  
CURRENT FILING DATE: 2003-06-17  
PRIOR APPLICATION NUMBER: US 09/657,445  
PRIOR FILING DATE: 2000-09-08  
PRIOR APPLICATION NUMBER: US 60/153,201  
PRIOR FILING DATE: 1999-09-10  
PRIOR APPLICATION NUMBER: US 60/160,444  
PRIOR FILING DATE: 1999-10-19  
NUMBER OF SEQ ID NOS: 9  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 2  
LENGTH: 13  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Synthetic oligonucleotide with potential inhibition activity  
US-10-463-076-2

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 TTGCTTAACCCCTA 54  
|||||

Db 13 TTGCTTAACCCCTA 1

RESULT 303  
US-10-463-076-8/c  
Sequence 8, Application US/10463076  
Publication No. US20030212032A1  
GENERAL INFORMATION:  
APPLICANT: Geron Corporation  
APPLICANT: Gryaznov, Sergei  
APPLICANT: Pongracz, Kristina  
APPLICANT: Matray, Tracey  
TITLE OF INVENTION: Oligonucleotide N3'-->P5' Thiophosphoramidates: Their Synthesis  
FILE REFERENCE: 039/004C  
CURRENT APPLICATION NUMBER: US/10/463,076  
CURRENT FILING DATE: 2003-06-17  
PRIOR APPLICATION NUMBER: US 09/657,445  
PRIOR FILING DATE: 2000-09-08  
PRIOR APPLICATION NUMBER: US 60/153,201  
PRIOR FILING DATE: 1999-09-10  
PRIOR APPLICATION NUMBER: US 60/160,444  
PRIOR FILING DATE: 1999-10-19  
NUMBER OF SEQ ID NOS: 9  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 8  
LENGTH: 13  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Synthetic oligonucleotide with potential inhibition activity  
US-10-463-076-8

Query Match 2.9%; Score 13; DB 1; Length 13;  
Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCTAACTG 58  
 Db 13 CTAACCTAACTG 1

## RESULT 304

US-10-181-823-18/c  
 ; Sequence 18, Application US/10181823  
 ; Publication No. US20040126752A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Geron Corporation  
 ; APPLICANT: Gryaznov, Sergei  
 ; APPLICANT: Schultz, Ronald G  
 ; TITLE OF INVENTION: 2'-Arabino-Fluoroligonucleotide N3'-->P5' Phosphoramidates: Their Synthesis and Use  
 ; FILE REFERENCE: 049/002  
 ; CURRENT APPLICATION NUMBER: US/10/181,823  
 ; CURRENT FILING DATE: 2003-12-29  
 ; PRIOR APPLICATION NUMBER: PCT/US01/01918  
 ; PRIOR FILING DATE: 2001-01-19  
 ; NUMBER OF SEQ ID NOS: 23  
 ; SOFTWARE: PatentIn version 3.1  
 ; SEQ ID NO 18  
 ; LENGTH: 13  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens  
 ; OTHER INFORMATION: Synthetic oligonucleotide with potential inhibition activity  
 US-10-181-823-18

Query Match 2.9%; Score 13; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGCTAACCCCTA 54  
 Db 13 TTGCTAACCCCTA 1

## RESULT 305

US-10-181-823-22/c  
 ; Sequence 22, Application US/10181823  
 ; Publication No. US20040126752A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Geron Corporation  
 ; APPLICANT: Gryaznov, Sergei  
 ; APPLICANT: Schultz, Ronald G  
 ; TITLE OF INVENTION: 2'-Arabino-Fluoroligonucleotide N3'-->P5' Phosphoramidates: Their Synthesis and Use  
 ; FILE REFERENCE: 049/002  
 ; CURRENT APPLICATION NUMBER: US/10/181,823  
 ; CURRENT FILING DATE: 2003-12-29  
 ; PRIOR APPLICATION NUMBER: PCT/US01/01918  
 ; PRIOR FILING DATE: 2001-01-19  
 ; NUMBER OF SEQ ID NOS: 23  
 ; SOFTWARE: PatentIn version 3.1  
 ; SEQ ID NO 22  
 ; LENGTH: 13  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens  
 ; OTHER INFORMATION: Synthetic oligonucleotide with potential inhibition activity  
 US-10-181-823-22

Query Match 2.9%; Score 13; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGCTAACCCCTA 54  
 Db 13 TTGCTAACCCCTA 1

## RESULT 306

US-10-967-755-2/c  
 ; Sequence 2, Application US/10967755

; Publication No. US20050049408A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Geron Corporation  
 ; APPLICANT: Gryaznov, Sergei  
 ; APPLICANT: Pongracz, Krisztina  
 ; APPLICANT: Matray, Tracey  
 ; TITLE OF INVENTION: Oligonucleotide N3'-->P5' Thiophosphoramidates: Their Synthesis and Use  
 ; FILE REFERENCE: 039/005C  
 ; CURRENT APPLICATION NUMBER: US/10/967,755  
 ; CURRENT FILING DATE: 2004-10-18  
 ; PRIOR APPLICATION NUMBER: US 10/463,076  
 ; PRIOR FILING DATE: 2003-06-17  
 ; PRIOR APPLICATION NUMBER: US 09/657,445  
 ; PRIOR FILING DATE: 2000-09-08  
 ; PRIOR APPLICATION NUMBER: US 60/153,201  
 ; PRIOR FILING DATE: 1999-09-10  
 ; PRIOR APPLICATION NUMBER: US 60/160,444  
 ; PRIOR FILING DATE: 1999-10-19  
 ; NUMBER OF SEQ ID NOS: 9  
 ; SOFTWARE: PatentIn version 3.1  
 ; SEQ ID NO 2  
 ; LENGTH: 13  
 ; TYPE: DNA  
 ; ORGANISM: Artificial Sequence  
 ; FEATURE:  
 ; OTHER INFORMATION: Synthetic oligonucleotide with potential inhibition activity  
 US-10-967-755-2

Query Match 2.9%; Score 13; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 42 TTGCTAACCCCTA 54  
 Db 13 TTGCTAACCCCTA 1

## RESULT 307

US-10-967-755-8/c  
 ; Sequence 8, Application US/10967755  
 ; Publication No. US20050049408A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Geron Corporation  
 ; APPLICANT: Gryaznov, Sergei  
 ; APPLICANT: Pongracz, Krisztina  
 ; APPLICANT: Matray, Tracey  
 ; TITLE OF INVENTION: Oligonucleotide N3'-->P5' Thiophosphoramidates: Their Synthesis and Use  
 ; FILE REFERENCE: 039/005C  
 ; CURRENT APPLICATION NUMBER: US/10/967,755  
 ; CURRENT FILING DATE: 2004-10-18  
 ; PRIOR APPLICATION NUMBER: US 10/463,076  
 ; PRIOR FILING DATE: 2003-06-17  
 ; PRIOR APPLICATION NUMBER: US 09/657,445  
 ; PRIOR FILING DATE: 2000-09-08  
 ; PRIOR APPLICATION NUMBER: US 60/153,201  
 ; PRIOR FILING DATE: 1999-09-10  
 ; PRIOR APPLICATION NUMBER: US 60/160,444  
 ; PRIOR FILING DATE: 1999-10-19  
 ; NUMBER OF SEQ ID NOS: 9  
 ; SOFTWARE: PatentIn version 3.1  
 ; SEQ ID NO 8  
 ; LENGTH: 13  
 ; TYPE: DNA  
 ; ORGANISM: Artificial Sequence  
 ; FEATURE:  
 ; OTHER INFORMATION: Synthetic oligonucleotide with potential inhibition activity  
 US-10-967-755-8

Query Match 2.9%; Score 13; DB 1; Length 13;  
 Best Local Similarity 100.0%; Pred. No. 1.5e+02;  
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 46 CTAACCTAACTG 58

Db 13 CTAACCCCTAACTG 1

RESULT 308  
US-10-618-779-34  
; Sequence 34, Application US/10618779  
; Publication No. US20050175633A1  
; GENERAL INFORMATION:  
; APPLICANT: PAUL, PREM S.  
; MENG, XIANG-JIN  
; HALBUR, PATRICK G.  
; MOROZOV, IGOR  
; LUM, MELISSA A.  
; TITLE OF INVENTION: A POLYNUCLEIC ACID ISOLATED FROM A  
; PORCINE REPRODUCTIVE AND RESPIRATORY SYNDROME VIRUS (PRRSV)  
; A PROTEIN ENCODED BY THE POLYNUCLEIC ACID, A VACCINE  
; PREPARED FROM OR CONTAINING THE POLYNUCLEIC ACID OR  
; NUMBER OF SEQUENCES: 77  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,  
; P.C.  
; STREET: 1755 S. Jefferson Davis Highway, Suite 400  
; CITY: Arlington  
; STATE: Virginia  
; COUNTRY: U.S.A.  
; ZIP: 22202  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/10/618,779  
; FILING DATE: 15-Jul-2003  
; CLASSIFICATION: <Unknown>  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US/08/301,435  
; FILING DATE: 01-SEP-1994  
; APPLICATION NUMBER: US 08/131,625  
; FILING DATE: 05-OCT-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Lavalleye, Jean-Paul M.P.  
; REGISTRATION NUMBER: 31,451  
; REFERENCE/DOCKET NUMBER: 4625-021-55X CIP  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (703) 413-3000  
; TELEFAX: (703) 413-2220  
; TELEX: 248855 OPAT UR  
; INFORMATION FOR SEQ ID NO: 34:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 16 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: unknown  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
; SEQUENCE DESCRIPTION: SEQ ID NO: 34:  
US-10-618-779-34

Query Match 2.9%; Score 13; DB 1; Length 16;  
Best Local Similarity 100.0%; Pred. No. 2.3e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 268 GGGGCTTCTCCGG 280  
Db 4 GGGGCTTCTCCGG 16

RESULT 309  
US-10-238-700-3509/c  
; Sequence 3509, Application US/10238700  
; Publication No. US20030153521A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: McSwiggen, James  
; TITLE OF INVENTION: Nucleic Acid Treatment of Diseases or Conditions Related to Level  
; FILE REFERENCE: 400/057 (MBHB01-1158-A)  
; CURRENT APPLICATION NUMBER: US/10/238,700  
; CURRENT FILING DATE: 2002-09-18  
; PRIOR APPLICATION NUMBER: PCT/US 02/16840  
; PRIOR FILING DATE: 2002-05-29  
; PRIOR APPLICATION NUMBER: US 60/318,471  
; PRIOR FILING DATE: 2001-09-10  
; NUMBER OF SEQ ID NOS: 4666  
; SOFTWARE: Patent In version 3.0  
; SEQ ID NO 3509  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-10-238-700-3509

Query Match 2.9%; Score 13; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 2.6e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 225 CCTGCCCAGCCCC 237  
Db 13 CCTGCCCAGCCCC 1

RESULT 310  
US-10-724-270-2188/c  
; Sequence 2188, Application US/10724270  
; Publication No. US20050080031A1  
; GENERAL INFORMATION:  
; APPLICANT: McSwiggen, James  
; TITLE OF INVENTION: Nucleic Acid Treatment of Diseases or Conditions Related to Level  
; FILE REFERENCE: 400/046-US (MBHB02-326-A)  
; CURRENT APPLICATION NUMBER: US/10/724,270  
; CURRENT FILING DATE: 2003-11-26  
; PRIOR APPLICATION NUMBER: PCT/US02/16840  
; PRIOR FILING DATE: 2002-05-29  
; PRIOR APPLICATION NUMBER: US 60/318,471  
; PRIOR FILING DATE: 2001-09-10  
; PRIOR APPLICATION NUMBER: US 60/296,249  
; PRIOR FILING DATE: 2001-06-06  
; PRIOR APPLICATION NUMBER: US 60/294,140  
; PRIOR FILING DATE: 2001-05-29  
; PRIOR APPLICATION NUMBER: US 10/238,700  
; PRIOR FILING DATE: 2002-09-10  
; PRIOR APPLICATION NUMBER: US 10/163,552  
; PRIOR FILING DATE: 2002-06-06  
; PRIOR APPLICATION NUMBER: US 10/157,580  
; PRIOR FILING DATE: 2002-05-29  
; PRIOR APPLICATION NUMBER: US 10/693,059  
; PRIOR FILING DATE: 2002-10-23  
; PRIOR APPLICATION NUMBER: US 10/444,853  
; PRIOR FILING DATE: 2003-05-23  
; PRIOR APPLICATION NUMBER: US 10/417,012  
; PRIOR FILING DATE: 2003-04-16  
; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 6810  
; SOFTWARE: Patent In version 3.0  
; SEQ ID NO 2188  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-10-724-270-2188

Query Match 2.9%; Score 13; DB 1; Length 17;  
Best Local Similarity 100.0%; Pred. No. 2.6e+02;  
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 225 CCTGCCCAGCCCC 237

```
Db      13  CCTGCCCGAGCCCC 1
|||||
RESULT 311
US-08-887-505-159
; Sequence 159, Application US/08887505
; Publication No. US20020081577A1
; GENERAL INFORMATION:
; APPLICANT: Kilkuskie, Robert E.
; APPLICANT: Frank, Bruce L.
; APPLICANT: Goodchild, John
; APPLICANT: Wolfe, Jia L.
; APPLICANT: Roberts, Peter C.
; APPLICANT: Hamlin, Jr., Henry A.
; APPLICANT: Walther, Debra M.
; TITLE OF INVENTION: OLIGONUCLEOTIDES SPECIFIC FOR
; TITLE OF INVENTION: HEPATITIS C VIRUS
; NUMBER OF SEQUENCES: 172
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Hale and Dorr LLP
; STREET: 60 State Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/887,505
; FILING DATE:
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/471,968
; FILING DATE: 08-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Kerner, Ann-Louise
; REGISTRATION NUMBER: 33,523
; REFERENCE/DOCKET NUMBER: HVZ-040CIP
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 526-6000
; TELEFAX: (617) 526-5000
; INFORMATION FOR SEQ ID NO: 159:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA/RNA
; HYPOTHETICAL: NO
; ANTI-SENSE: YES
US-08-887-505-159
Query Match      2.8%; Score 12.8; DB 1; Length 16;
Best Local Similarity 81.2%; Pred. No. 2.4e+02;
Matches 13; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY      199  CCTCTCCCGGGGACCTG 214
|||||
Db      1  CCCUCCGGGGTCTCTG 16
|||||
RESULT 312
US-10-712-672-1787
; Sequence 1787, Application US/10712672
; Publication No. US20040102413A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Chowrira, Bharat
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; APPLICANT: McSwiggen, Jim
; APPLICANT: Stinchcomb, Dan
; TITLE OF INVENTION: Method and Reagent for the Inhibition of Telomerase Enzyme
; FILE REFERENCE: MBH00-882-C (400/019)
; CURRENT APPLICATION NUMBER: US/10/712,672
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US/09/653,225
; PRIOR FILING DATE: 2000-08-31
; PRIOR APPLICATION NUMBER: 60/197,769
; PRIOR FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/150,713
; PRIOR FILING DATE: 1999-08-31
; NUMBER OF SEQ ID NOS: 5586
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1787
; LENGTH: 16
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-712-672-1787
Query Match      2.8%; Score 12.8; DB 1; Length 16;
Best Local Similarity 81.2%; Pred. No. 2.4e+02;
Matches 13; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY      247  CCTGGAGCGCGGTC 262
|||||
Db      1  CCUGAGCGCCGAGCC 16
|||||
RESULT 313
US-10-483-958-61/c
; Sequence 61, Application US/10483958
; Publication No. US20040254363A1
; GENERAL INFORMATION:
; APPLICANT: PRICE FOUNDATION LIMITED
; APPLICANT: YEAGER, Meredith
; TITLE OF INVENTION: GENES AND SNPs ASSOCIATED WITH EATING DISORDERS
; FILE REFERENCE: 53061-5005-US
; CURRENT APPLICATION NUMBER: US/10/483,958
; CURRENT FILING DATE: 2004-01-16
; PRIOR APPLICATION NUMBER: PCT/US02/22555
; PRIOR FILING DATE: 2002-07-16
; PRIOR APPLICATION NUMBER: US 60/305,153
; PRIOR FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: US 60/306,440
; PRIOR FILING DATE: 2001-07-20
; PRIOR APPLICATION NUMBER: US 60/331,285
; PRIOR FILING DATE: 2001-11-13
; PRIOR APPLICATION NUMBER: US 60/340,843
; PRIOR FILING DATE: 2001-12-19
; PRIOR APPLICATION NUMBER: US 60/340,844
; NUMBER OF SEQ ID NOS: 98
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 61
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: HTR1d probe: FAM and MGB tagged
US-10-483-958-61
Query Match      2.8%; Score 12.8; DB 1; Length 16;
Best Local Similarity 87.5%; Pred. No. 2.4e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      2  GCTTCGGAGGGTGGG 17
|||||
Db      16  GCTTCGGTGGTGGG 1
|||||
RESULT 314
```



US-10-730-771-444  
; Sequence 444, Application US/10730771  
; Publication No. US20050074787A1  
; GENERAL INFORMATION:  
; APPLICANT: Fan, Jian-Bing  
; APPLICANT: Hirschhorn, Joel N.  
; APPLICANT: Huang, Xiaohua  
; APPLICANT: Kaplan, Paul  
; APPLICANT: Lander, Eric S.  
; APPLICANT: Lockhart, David J.  
; APPLICANT: Ryder, Thomas  
; APPLICANT: Sklar, Pamela  
; TITLE OF INVENTION: UNIVERSAL ARRAYS  
; FILE REFERENCE: 2825.1016-007  
; CURRENT APPLICATION NUMBER: US/10/730,771  
; CURRENT FILING DATE: 2003-12-08  
; PRIOR APPLICATION NUMBER: US 60/126,473  
; PRIOR FILING DATE: 1999-03-26  
; PRIOR APPLICATION NUMBER: US 60/140,359  
; PRIOR FILING DATE: 1999-06-23  
; PRIOR APPLICATION NUMBER: US 09/536,841  
; PRIOR FILING DATE: 2000-03-27  
; NUMBER OF SEQ ID NOS: 590  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 444  
; LENGTH: 16  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Template sequence  
US-10-730-771-444

Query Match 2.8%; Score 12.8; DB 1; Length 16;  
Best Local Similarity 87.5%; Pred. No. 2.4e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 24 AGGGTGTGGGCATT 39  
||| |||||  
Db 1 AGGGTGTGGGCAGT 16

RESULT 315  
US-09-961-077-828  
; Sequence 828, Application US/09961077  
; Publication No. US20030014775A1  
; GENERAL INFORMATION:  
; APPLICANT: Zwick, Michael G.  
; Edington, Brent E.  
; McSwiggen, James A.  
; Merlo, Patricia Ann Owens  
; Guo, Lining  
; Skokut, Thomas A.  
; Young, Scott A.  
; Folkerts, Otto  
; Merlo, Donald J.

TITLE OF INVENTION: COMPOSITION AND METHODS FOR  
MODULATION OF GENE EXPRESSION  
IN PLANTS

NUMBER OF SEQUENCES: 1263  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Lyon & Lyon  
STREET: 633 West Fifth Street  
Suite 4700  
CITY: Los Angeles  
STATE: California  
COUNTRY: U.S.A.  
ZIP: 90071-2066  
COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb  
storage  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: IBM P.C. DOS 5.0  
SOFTWARE: Word Perfect 5.1

CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/961,077  
; FILING DATE: 21-Sep-2001  
; CLASSIFICATION: <Unknown>  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/679,645  
; FILING DATE: July 12, 1996  
; APPLICATION NUMBER: 60/001,135  
; FILING DATE: July 13, 1995  
; APPLICATION NUMBER: 08/300,726  
; FILING DATE: September 2, 1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Warburg, Richard J.  
; REGISTRATION NUMBER: 32,327  
; REFERENCE/DOCKET NUMBER: 219/247  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (213) 489-1600  
; TELEFAX: (213) 955-0440  
; TELEX: 67-3510  
; INFORMATION FOR SEQ ID NO: 828:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 17 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; SEQUENCE DESCRIPTION: SEQ ID NO: 828:  
US-09-961-077-828

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 62.5%; Pred. No. 2.7e+02;  
Matches 10; Conservative 4; Mismatches 2; Indels 0; Gaps 0;  
QY 107 GCTGACTTTCAGCGG 122  
||| |||||  
Db 1 GCGCCUUCACGCG 16

RESULT 316  
US-09-780-533A-27/c  
; Sequence 27, Application US/09780533A  
; Publication No. US20030060611A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Blatt, Larry  
; APPLICANT: McSwiggen, Jim  
; APPLICANT: Chowrira, Bharat  
; APPLICANT: Haeblerli, Pete  
; TITLE OF INVENTION: Method and Reagent for the Inhibition of NOGO Gene  
; FILE REFERENCE: MBH00,878-A (400/011)  
; CURRENT APPLICATION NUMBER: US/09/780,533A  
; CURRENT FILING DATE: 2001-02-09  
; PRIOR APPLICATION NUMBER: US 60/181,797  
; PRIOR FILING DATE: 2000-02-11  
; NUMBER OF SEQ ID NOS: 6679  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 27  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-09-780-533A-27

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
QY 253 GCGCGCGTGGCGCG 268  
||| |||||  
Db 16 GCGCGCGACGCGCG 1

RESULT 317  
US-09-780-533A-58/c  
; Sequence 58, Application US/09780533A

```
; Publication No. US20030060611A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Blatt, Larry
; APPLICANT: McSwiggen, Jim
; APPLICANT: Chowrira, Bharat
; APPLICANT: Haeblerli, Pete
; TITLE OF INVENTION: Method and Reagent for the Inhibition of NOGO Gene
; FILE REFERENCE: MBH00.878-A (400/011)
; CURRENT APPLICATION NUMBER: US/09/780,533A
; CURRENT FILING DATE: 2001-02-09
; PRIOR FILING DATE: 2000-02-11
; NUMBER OF SEQ ID NOS: 6679
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 58
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
; US-09-780-533A-58

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 363 GCCGCGAGGAGGAA 378
Db 17 GCAGCAGGAGAGCAA 2

RESULT 318
US-09-780-533A-59/c
; Sequence 59, Application US/09780533A
; Publication No. US20030060611A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Blatt, Larry
; APPLICANT: McSwiggen, Jim
; APPLICANT: Chowrira, Bharat
; APPLICANT: Haeblerli, Pete
; TITLE OF INVENTION: Method and Reagent for the Inhibition of NOGO Gene
; FILE REFERENCE: MBH00.878-A (400/011)
; CURRENT APPLICATION NUMBER: US/09/780,533A
; CURRENT FILING DATE: 2001-02-09
; PRIOR FILING DATE: 2000-02-11
; NUMBER OF SEQ ID NOS: 6679
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 59
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
; US-09-780-533A-59

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 363 GCCGCGAGGAGGAA 378
Db 16 GCAGCAGGAGAGCAA 1

RESULT 319
US-09-780-533A-1810/c
; Sequence 1810, Application US/09780533A
; Publication No. US20030060611A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Blatt, Larry
; APPLICANT: McSwiggen, Jim
; APPLICANT: Chowrira, Bharat
; APPLICANT: Haeblerli, Pete
```

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; TITLE OF INVENTION: Method and Reagent for the Inhibition of NOGO Gene
; FILE REFERENCE: MBH00.878-A (400/011)
; CURRENT APPLICATION NUMBER: US/09/780,533A
; CURRENT FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: US 60/181,797
; PRIOR FILING DATE: 2000-02-11
; NUMBER OF SEQ ID NOS: 6679
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1810
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
; US-09-780-533A-1810

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 254 GCCGCGGTGCGCCGG 269
Db 17 GCCCGGACAGCCCGG 2

RESULT 320
US-09-877-478-1053/c
; Sequence 1053, Application US/09877478
; Publication No. US20030068301A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Draper, Kenneth
; APPLICANT: Blatt, Larry
; APPLICANT: McSwiggen, Jim
; APPLICANT: Morrissey, Dave
; TITLE OF INVENTION: Method and Reagent for Inhibiting Hepatitis B Virus Replication
; FILE REFERENCE: MBH00-845-H (400/029)
; CURRENT APPLICATION NUMBER: US/09/877,478
; CURRENT FILING DATE: 2001-12-31
; PRIOR FILING DATE: 2001-12-31
; PRIOR APPLICATION NUMBER: US 07/882,712
; PRIOR FILING DATE: 1992-05-14
; PRIOR APPLICATION NUMBER: US 09/531,025
; PRIOR FILING DATE: 2000-03-20
; PRIOR APPLICATION NUMBER: US 09/636,385
; PRIOR FILING DATE: 2000-08-09
; PRIOR APPLICATION NUMBER: US 09/696,347
; PRIOR FILING DATE: 2000-10-24
; PRIOR APPLICATION NUMBER: US 08/193,627
; PRIOR FILING DATE: 1994-02-07
; PRIOR APPLICATION NUMBER: US 08/433,993
; PRIOR FILING DATE: 1995-05-04
; PRIOR APPLICATION NUMBER: US 08/434,504
; PRIOR FILING DATE: 1995-05-04
; PRIOR APPLICATION NUMBER: US 09/436,430
; PRIOR FILING DATE: 1999-11-08
; NUMBER OF SEQ ID NOS: 6586
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1053
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Hepatitis B virus
; US-09-877-478-1053

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 117 AGCGGCGGAAAGCC 132
Db 16 AGCGGCGGTAGGCC 1

RESULT 321
US-09-848-754A-1036/c
; Sequence 1036, Application US/09848754A
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; Publication No. US20030073207A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Epidermal Growth Factor Receptors
; FILE REFERENCE: MBH00-958-I (400/018)
; CURRENT APPLICATION NUMBER: US/09/848,754A
; CURRENT FILING DATE: 2001-05-03
; NUMBER OF SEQ ID NOS: 9645
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1036
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
; US-09-848-754A-1036

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 201 CTCCTCCGGGACCTGG 216
Db 17 CTCCTCCGGGCGCTGTG 2

RESULT 322
US-09-848-754A-1037/c
; Sequence 1037, Application US/09848754A
; Publication No. US20030073207A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Epidermal Growth Factor Receptors
; FILE REFERENCE: MBH00-958-I (400/018)
; CURRENT APPLICATION NUMBER: US/09/848,754A
; CURRENT FILING DATE: 2001-05-03
; NUMBER OF SEQ ID NOS: 9645
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1037
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
; US-09-848-754A-1037

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 201 CTCCTCCGGGACCTGG 216
Db 17 CTCCTCCGGGCGCTGTG 2

RESULT 323
US-09-848-754A-1038/c
; Sequence 1038, Application US/09848754A
; Publication No. US20030073207A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Epidermal Growth Factor Receptors
; FILE REFERENCE: MBH00-958-I (400/018)
; CURRENT APPLICATION NUMBER: US/09/848,754A
; CURRENT FILING DATE: 2001-05-03
; NUMBER OF SEQ ID NOS: 9645
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1038
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
; US-09-848-754A-1038

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 201 CTCCTCCGGGACCTGG 216
Db 17 CTCCTCCGGGCGCTGTG 1

RESULT 324
US-09-848-754A-1039/c
; Sequence 1039, Application US/09848754A
; Publication No. US20030073207A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Epidermal Growth Factor Receptors
; FILE REFERENCE: MBH00-958-I (400/018)
; CURRENT APPLICATION NUMBER: US/09/848,754A
; CURRENT FILING DATE: 2001-05-03
; NUMBER OF SEQ ID NOS: 9645
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1039
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
; US-09-848-754A-1039

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 199 CCTCTCCCGGGGACCTG 214
Db 16 CTCTCCCGGGGGCGCTG 1

RESULT 325
US-09-848-754A-1653
; Sequence 1653, Application US/09848754A
; Publication No. US20030073207A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Epidermal Growth Factor Receptors
; FILE REFERENCE: MBH00-958-I (400/018)
; CURRENT APPLICATION NUMBER: US/09/848,754A
; CURRENT FILING DATE: 2001-05-03
; NUMBER OF SEQ ID NOS: 9645
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1653
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
; US-09-848-754A-1653

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 199 CCTCTCCCGGGGACCTG 214
Db 16 CTCTCCCGGGGGCGCTG 1

RESULT 326
US-09-776-474-7/c
; Sequence 7, Application US/09776474
; Publication No. US20030087847A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Jarvis, Thale
; APPLICANT: Boher, Robert
; APPLICANT: Holman, Patricia
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Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 199 CCTCTCCCGGGGACCTG 214
Db 17 CTCTCCCGGGGGCGCTG 2

RESULT 324
US-09-848-754A-1039/c
; Sequence 1039, Application US/09848754A
; Publication No. US20030073207A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Epidermal Growth Factor Receptors
; FILE REFERENCE: MBH00-958-I (400/018)
; CURRENT APPLICATION NUMBER: US/09/848,754A
; CURRENT FILING DATE: 2001-05-03
; NUMBER OF SEQ ID NOS: 9645
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1039
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
; US-09-848-754A-1039

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 199 CCTCTCCCGGGGACCTG 214
Db 16 CTCTCCCGGGGGCGCTG 1

RESULT 325
US-09-848-754A-1653
; Sequence 1653, Application US/09848754A
; Publication No. US20030073207A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Epidermal Growth Factor Receptors
; FILE REFERENCE: MBH00-958-I (400/018)
; CURRENT APPLICATION NUMBER: US/09/848,754A
; CURRENT FILING DATE: 2001-05-03
; NUMBER OF SEQ ID NOS: 9645
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1653
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
; US-09-848-754A-1653

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 231 CAGCCCCCGAACCCTG 246
Db 2 CAGCCUCUGAACCCCG 17

RESULT 326
US-09-776-474-7/c
; Sequence 7, Application US/09776474
; Publication No. US20030087847A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Jarvis, Thale
; APPLICANT: Boher, Robert
; APPLICANT: Holman, Patricia
```

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; APPLICANT: Fattaey, Ali
; APPLICANT: McSwiggen, Jim
; TITLE OF INVENTION: Method and Reagent for the Inhibition of Checkpoint Kinase-1 (CHK)
; TITLE OF INVENTION: Enzyme
; FILE REFERENCE: MBH00-955-A (400/008)
; CURRENT APPLICATION NUMBER: US/09/776,474
; CURRENT FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,983
; FILING DATE: 2000-03-02
; NUMBER OF SEQ ID NOS: 2992
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 7
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid
US-09-776-474-7

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 272 CTCTCCGGAGGCACC 287
Db 17 CTCTCCATAGGCACC 2

RESULT 327
US-09-930-423-333/c
; Sequence 333, Application US/09930423
; Publication No. US20030092003A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Blatt, Larry
; APPLICANT: McSwiggen, Jim
; TITLE OF INVENTION: Method and Reagent for the Treatment of Alzheimer's Disease
; FILE REFERENCE: MBH00,918-A 400/027
; CURRENT APPLICATION NUMBER: US/09/930,423
; CURRENT FILING DATE: 2001-08-15
; NUMBER OF SEQ ID NOS: 4553
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 333
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo Sapiens
US-09-930-423-333

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 16 GGCCTGGAGGGGTGG 31
Db 17 GGGCTGGAGGGCGG 2

RESULT 328
US-09-930-423-334/c
; Sequence 334, Application US/09930423
; Publication No. US20030092003A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Blatt, Larry
; APPLICANT: McSwiggen, Jim
; TITLE OF INVENTION: Method and Reagent for the Treatment of Alzheimer's Disease
; FILE REFERENCE: MBH00,918-A 400/027
; CURRENT APPLICATION NUMBER: US/09/930,423
; CURRENT FILING DATE: 2001-08-15
; NUMBER OF SEQ ID NOS: 4553
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 334
; LENGTH: 17
```

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; TYPE: RNA
; ORGANISM: Homo Sapiens
US-09-930-423-334

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 15 GGGCTGGAGGGGTG 30
Db 16 GGGCTGGAGGGGCG 1

RESULT 329
US-09-930-423-335/c
; Sequence 335, Application US/09930423
; Publication No. US20030092003A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Blatt, Larry
; APPLICANT: McSwiggen, Jim
; TITLE OF INVENTION: Method and Reagent for the Treatment of Alzheimer's Disease
; FILE REFERENCE: MBH00,918-A 400/027
; CURRENT APPLICATION NUMBER: US/09/930,423
; CURRENT FILING DATE: 2001-08-15
; NUMBER OF SEQ ID NOS: 4553
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 335
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo Sapiens
US-09-930-423-335

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 13 GTGGGCTGGAGGGG 28
Db 17 GCGGGCTGGAGGGG 2

RESULT 330
US-09-930-423-1159/c
; Sequence 1159, Application US/09930423
; Publication No. US20030092003A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Blatt, Larry
; APPLICANT: McSwiggen, Jim
; TITLE OF INVENTION: Method and Reagent for the Treatment of Alzheimer's Disease
; FILE REFERENCE: MBH00,918-A 400/027
; CURRENT APPLICATION NUMBER: US/09/930,423
; CURRENT FILING DATE: 2001-08-15
; NUMBER OF SEQ ID NOS: 4553
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1159
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo Sapiens
US-09-930-423-1159

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 12 GGTGGCTGGAGGG 27
Db 16 GCGGGCTGGAGGG 1

RESULT 331
US-09-930-423-1470
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; Sequence 1470, Application US/09930423  
; Publication No. US20030092003A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Blatt, Larry  
; APPLICANT: McSwiggen, Jim  
; TITLE OF INVENTION: Method and Reagent for the Treatment of Alzheimer's Disease  
; FILE REFERENCE: MBH00,918-A 400/027  
; CURRENT APPLICATION NUMBER: US/09/930,423  
; CURRENT FILING DATE: 2001-08-15  
; NUMBER OF SEQ ID NOS: 4553  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 1470  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo Sapiens  
US-09-930-423-1470

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 242 CCCCCTGGAGCCG 257  
DB 2 CCCCCTGGAGCCCG 17

RESULT 332  
US-09-827-395A-899  
; Sequence 899, Application US/09827395A  
; Publication No. US20030113891A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Lawrence Blatt  
; APPLICANT: James McSwiggen  
; APPLICANT: Bharat Chowrira  
; TITLE OF INVENTION: Method and Reagent for the Inhibition of NOGO and NOGO Receptor G  
; FILE REFERENCE: MBH00-878-C (400/017)  
; CURRENT APPLICATION NUMBER: US/09/827,395A  
; CURRENT FILING DATE: 2001-04-05  
; PRIOR APPLICATION NUMBER: 09/780,533  
; PRIOR FILING DATE: 2001-02-09  
; PRIOR APPLICATION NUMBER: 60/181,797  
; PRIOR FILING DATE: 2000-02-11  
; NUMBER OF SEQ ID NOS: 2617  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 899  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-09-827-395A-899

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 75.0%; Pred. No. 2.7e+02;  
Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 263 GGCCCGGGCTCTCC 278  
DB 2 GGCCCGGGGCGUGUCC 17

RESULT 333  
US-09-740-332-1425  
; Sequence 1425, Application US/09740332  
; Publication No. US20030125270A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals Inc.  
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Relate  
; FILE REFERENCE: RPI 400/003  
; CURRENT APPLICATION NUMBER: US/09/740,332  
; CURRENT FILING DATE: 2001-03-26  
; NUMBER OF SEQ ID NOS: 9704

; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 1425  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: artificial sequence  
; FEATURE:  
; NAME/KEY: misc\_feature  
; LOCATION:  
; OTHER INFORMATION: oligonucleotide substrate  
US-09-740-332-1425

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 75.0%; Pred. No. 2.7e+02;  
Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 20 TGGAGGGGTGGTGGC 35  
DB 2 UGGGAGGGUGGGGCG 17

RESULT 334  
US-09-740-332-3639/c  
; Sequence 3639, Application US/09740332  
; Publication No. US20030125270A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals Inc.  
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Relate  
; FILE REFERENCE: RPI 400/003  
; CURRENT APPLICATION NUMBER: US/09/740,332  
; CURRENT FILING DATE: 2001-03-26  
; NUMBER OF SEQ ID NOS: 9704  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 3639  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: artificial sequence  
; FEATURE:  
; NAME/KEY: misc\_feature  
; LOCATION:  
; OTHER INFORMATION: oligonucleotide substrate  
US-09-740-332-3639

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 208 GCACCTGGCGGGTCC 223  
DB 16 GCACCTGGCGGGTCC 1

RESULT 335  
US-09-740-332-3755/c  
; Sequence 3755, Application US/09740332  
; Publication No. US20030125270A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals Inc.  
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Relate  
; FILE REFERENCE: RPI 400/003  
; CURRENT APPLICATION NUMBER: US/09/740,332  
; CURRENT FILING DATE: 2001-03-26  
; NUMBER OF SEQ ID NOS: 9704  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 3755  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: artificial sequence  
; FEATURE:  
; NAME/KEY: misc\_feature  
; LOCATION:  
; OTHER INFORMATION: oligonucleotide substrate

## US-09-740-332-3755

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 433 GGACTGGGCTCACACA 448  
||||| ||| |||||  
Db 17 GGACTGGGCCACACA 2

## RESULT 336

US-09-792-818-331/c  
; Sequence 331, Application US/09792818  
; Publication No. US20030134806A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Jarvis, Thale  
; APPLICANT: Von Carlowitz, Ira  
; APPLICANT: McSwiggen, Jim  
; APPLICANT: Hamblin, Paul  
; APPLICANT: Ellis, Jonathan  
; TITLE OF INVENTION: Method and Reagent for the Inhibition of Grb-2-related with Inse  
; TITLE OF INVENTION: (GRID) Gene  
; FILE REFERENCE: MBH00-901-A (400/013)  
; CURRENT APPLICATION NUMBER: US/09/792,818  
; CURRENT FILING DATE: 2001-02-23  
; NUMBER OF SEQ ID NOS: 2304  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 331  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-09-792-818-331

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 200 CCTCCGCGGACCTGC 215  
||||| ||||| |||||  
Db 16 CCTCCCTGGGACCTCC 1

## RESULT 337

US-09-745-237A-333/c  
; Sequence 333, Application US/09745237A  
; Publication No. US20030143708A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Blatt, Larry  
; APPLICANT: McSwiggen, Jim  
; TITLE OF INVENTION: Method and Reagent for the Treatment of Alzheimer's Disease  
; FILE REFERENCE: 400/007 (MBH00-918-A)  
; CURRENT APPLICATION NUMBER: US/09/745,237A  
; CURRENT FILING DATE: 2002-04-15  
; NUMBER OF SEQ ID NOS: 4550  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 333  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-09-745-237A-333

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 16 GCGCTGGGAGGGGTGG 31  
||| ||||| |||||  
Db 17 GCGCTGGGAGGGGCGG 2

## RESULT 338

US-09-745-237A-334/c  
; Sequence 334, Application US/09745237A  
; Publication No. US20030143708A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Blatt, Larry  
; APPLICANT: McSwiggen, Jim  
; TITLE OF INVENTION: Method and Reagent for the Treatment of Alzheimer's Disease  
; FILE REFERENCE: 400/007 (MBH00-918-A)  
; CURRENT APPLICATION NUMBER: US/09/745,237A  
; CURRENT FILING DATE: 2002-04-15  
; NUMBER OF SEQ ID NOS: 4550  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 334  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-09-745-237A-334

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 15 GGGCTGGGAGGGGTG 30  
||| ||||| |||||  
Db 16 GGGCTGGGAGGGGCG 1

## RESULT 339

US-09-745-237A-335/c  
; Sequence 335, Application US/09745237A  
; Publication No. US20030143708A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Blatt, Larry  
; APPLICANT: McSwiggen, Jim  
; TITLE OF INVENTION: Method and Reagent for the Treatment of Alzheimer's Disease  
; FILE REFERENCE: 400/007 (MBH00-918-A)  
; CURRENT APPLICATION NUMBER: US/09/745,237A  
; CURRENT FILING DATE: 2002-04-15  
; NUMBER OF SEQ ID NOS: 4550  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 335  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-09-745-237A-335

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 13 GTGGCTGGGAGGGG 28  
||| ||||| |||||  
Db 17 GCGGGCTGGGAGGGG 2

## RESULT 340

US-09-745-237A-1159/c  
; Sequence 1159, Application US/09745237A  
; Publication No. US20030143708A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: McSwiggen, Jim  
; APPLICANT: Blatt, Larry  
; TITLE OF INVENTION: Method and Reagent for the Treatment of Alzheimer's Disease  
; FILE REFERENCE: 400/007 (MBH00-918-A)  
; CURRENT APPLICATION NUMBER: US/09/745,237A  
; CURRENT FILING DATE: 2002-04-15  
; NUMBER OF SEQ ID NOS: 4550  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 1159

```

; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-745-237A-1159

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 12 GGTGGGCGCTGGGAGGG 27
   ||||| |||||
Db 16 GCGGCGGCGCTGGGAGGG 1

RESULT 341
US-09-745-237A-1470
; Sequence 1470, Application US/09745237A
; Publication No. US20030143708A1
; GENERAL INFORMATION: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Blatt, Larry
; APPLICANT: McSwiggen, Jim
; TITLE OF INVENTION: Method and Reagent for the Treatment of Alzheimer's Disease
; FILE REFERENCE: 400/007 (MBHB00-918-A)
; CURRENT APPLICATION NUMBER: US/09/745,237A
; CURRENT FILING DATE: 2002-04-15
; NUMBER OF SEQ ID NOS: 4550
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1470
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-745-237A-1470

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 242 CCCCGCGCTGGAGCCG 257
   ||||| |||||
Db 2 CCCCGCGGAGCCCG 17

RESULT 342
US-09-817-879-1425
; Sequence 1425, Application US/09817879
; Publication No. US20030171311A1
; GENERAL INFORMATION: Ribozyme Pharmaceuticals Inc.
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Relate
; FILE REFERENCE: MBHB00-801-F
; CURRENT APPLICATION NUMBER: US/09/817,879
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9703
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1425
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-817-879-1425

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 75.0%; Pred. No. 2.7e+02;
Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 20 TGGAGGGGTGGTGGC 35
   :|||||
Db 2 UGGGAGGGUGGGUGGC 17
```

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RESULT 343
US-09-817-879-3639/c
; Sequence 3639, Application US/09817879
; Publication No. US20030171311A1
; GENERAL INFORMATION: Ribozyme Pharmaceuticals Inc.
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Relate
; FILE REFERENCE: MBHB00-801-F
; CURRENT APPLICATION NUMBER: US/09/817,879
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9703
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3639
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-817-879-3639

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 208 GGACCTGCGGGGTC 223
   ||||| |||||
Db 16 GCACCTGCGGGGTC 1

RESULT 344
US-09-817-879-3755/c
; Sequence 3755, Application US/09817879
; Publication No. US20030171311A1
; GENERAL INFORMATION: Ribozyme Pharmaceuticals Inc.
; APPLICANT: Ribozyme Pharmaceuticals Inc.
; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Relate
; FILE REFERENCE: MBHB00-801-F
; CURRENT APPLICATION NUMBER: US/09/817,879
; CURRENT FILING DATE: 2001-03-26
; NUMBER OF SEQ ID NOS: 9703
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3755
; LENGTH: 17
; TYPE: RNA
; ORGANISM: artificial sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-09-817-879-3755

Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 433 GGACTCGGCTCACACA 448
   ||||| |||||
Db 17 GGACTCGGCCCCACACA 2

RESULT 345
US-10-060-895A-738/c
; Sequence 738, Application US/10060895A
; Publication No. US20030104403A1
; GENERAL INFORMATION:
; APPLICANT: Zhang, Jian
; APPLICANT: Gu, Yizhong
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; APPLICANT: Nguyen, Cung-Tuong
; TITLE OF INVENTION: HUMAN UDP-GALNAC:POLYPEPTIDE N-ACETYL GALACTOSAMINYLTRANSFERASE 10
; FILE REFERENCE: PB0158
; CURRENT APPLICATION NUMBER: US/10/060,895A
; CURRENT FILING DATE: 2002-06-10
; PRIOR APPLICATION NUMBER: PCT/US01/00666
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00667
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00664
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00669
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00665
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00668
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00663
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00670
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: US 09/864,761
; PRIOR FILING DATE: 2001-05-23
; PRIOR APPLICATION NUMBER: US 60/315,984
; PRIOR FILING DATE: 2001-08-30
; NUMBER OF SEQ ID NOS: 1682
; SOFTWARE: Aecomica Sequence Listing Engine
; SEQ ID NO 738
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-060-895A-738

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      343 GCGAGGTTGAGGCCTT 358
Db      17 GCGCGGATCAGGCCTT 2

RESULT 346
US-10-060-895A-739/c
; Sequence 739, Application US/10060895A
; Publication No. US2003010403A1
; GENERAL INFORMATION:
; APPLICANT: Zhang, Jian
; APPLICANT: Gu, Yizhong
; APPLICANT: Nguyen, Cung-Tuong
; TITLE OF INVENTION: HUMAN UDP-GALNAC:POLYPEPTIDE N-ACETYL GALACTOSAMINYLTRANSFERASE 10
; FILE REFERENCE: PB0158
; CURRENT APPLICATION NUMBER: US/10/060,895A
; CURRENT FILING DATE: 2002-06-10
; PRIOR APPLICATION NUMBER: PCT/US01/00666
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00667
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00664
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00669
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00665
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00668
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00663
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00670
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: US 09/864,761
; PRIOR FILING DATE: 2001-05-23
; PRIOR APPLICATION NUMBER: US 60/315,984
```

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; PRIOR FILING DATE: 2001-08-30
; NUMBER OF SEQ ID NOS: 1682
; SOFTWARE: Aecomica Sequence Listing Engine
; SEQ ID NO 739
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-060-895A-739

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      343 GCGAGGTTGAGGCCTT 358
Db      16 GCGCGGATCAGGCCTT 1

RESULT 347
US-10-163-552-20/c
; Sequence 20, Application US/10163552
; Publication No. US20030105051A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, Jim
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; TITLE OF INVENTION: Nucleic acid treatment of diseases or conditions related to level:
; TITLE OF INVENTION: HER2
; FILE REFERENCE: MEHB01-1653-A (400/014)
; CURRENT APPLICATION NUMBER: US/10/163,552
; CURRENT FILING DATE: 2002-06-06
; NUMBER OF SEQ ID NOS: 1997
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 20
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-163-552-20

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      21 GCGAGGGGTGGTGGCC 36
Db      17 GCGAGGGGTGGGCGCC 2

RESULT 348
US-10-163-552-869/c
; Sequence 869, Application US/10163552
; Publication No. US20030105051A1
; GENERAL INFORMATION:
; APPLICANT: McSwiggen, Jim
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; TITLE OF INVENTION: Nucleic acid treatment of diseases or conditions related to level:
; TITLE OF INVENTION: HER2
; FILE REFERENCE: MEHB01-1653-A (400/014)
; CURRENT APPLICATION NUMBER: US/10/163,552
; CURRENT FILING DATE: 2002-06-06
; NUMBER OF SEQ ID NOS: 1997
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 869
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-163-552-869

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      6 GCGAGGGGTGGGCGCTG 21
Db      6 GCGAGGGGTGGGCGCTG 21
```



Db 17 GAGGAGCGTGGGCTG 2

RESULT 349

US-10-156-306-4930

; Sequence 4930. Application US/10156306

; Publication No. US20030119017A1

; GENERAL INFORMATION:

; APPLICANT: Ribozyme Pharmaceuticals, Inc.

; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Level

; FILE REFERENCE: MBH01-664-A (400/050)

; CURRENT FILING DATE: 2002-05-28

; NUMBER OF SEQ ID NOS: 8013

; SOFTWARE: PatentIn version 3.0

; SEQ ID NO 4930

; LENGTH: 17

; TYPE: RNA

; ORGANISM: Homo sapiens

US-10-156-306-4930

Query Match 2.8%; Score 12.8; DB 1; Length 17;

Best Local Similarity 75.0%; Pred. No. 2.7e+02;

Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 249 TGGAGCGCGCGTCCG 264

:|||||:|

Db 2 UGGAGCGCGCGUCCG 17

RESULT 350

US-10-156-306-6942

; Sequence 6942. Application US/10156306

; Publication No. US20030119017A1

; GENERAL INFORMATION:

; APPLICANT: Ribozyme Pharmaceuticals, Inc.

; TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Related to Level

; FILE REFERENCE: MBH01-664-A (400/050)

; CURRENT FILING DATE: 2002-05-28

; NUMBER OF SEQ ID NOS: 8013

; SOFTWARE: PatentIn version 3.0

; SEQ ID NO 6942

; LENGTH: 17

; TYPE: RNA

; ORGANISM: Homo sapiens

US-10-156-306-6942

Query Match 2.8%; Score 12.8; DB 1; Length 17;

Best Local Similarity 75.0%; Pred. No. 2.7e+02;

Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 246 GCCTGAGCGCGCGT 261

||:|||||:

Db 2 GCGUGAGCGCGGCU 17

RESULT 351

US-10-238-700-2700/c

; Sequence 2700. Application US/10238700

; Publication No. US20030153521A1

; GENERAL INFORMATION:

; APPLICANT: Ribozyme Pharmaceuticals, Inc.

; TITLE OF INVENTION: Nucleic Acid Treatment of Diseases or Conditions Related to Level

; FILE REFERENCE: 400/057 (MBH01-1158-A)

; CURRENT FILING DATE: 2002-09-18

; PRIOR APPLICATION NUMBER: PCT/US 02/16840

; PRIOR FILING DATE: 2002-05-29

; PRIOR APPLICATION NUMBER: US 60/318,471

; NUMBER OF SEQ ID NOS: 4666

; SOFTWARE: PatentIn version 3.0

; SEQ ID NO 3508

; LENGTH: 17

; TYPE: RNA

; ORGANISM: Homo sapiens

US-10-238-700-2700

Query Match 2.8%; Score 12.8; DB 1; Length 17;

Best Local Similarity 87.5%; Pred. No. 2.7e+02;

Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 254 GCCGCGTCCGCCCGG 269

|||||:|

Db 16 GCCGCGTCCGCCCGG 1

RESULT 352

US-10-238-700-2821

; Sequence 2821. Application US/10238700

; Publication No. US20030153521A1

; GENERAL INFORMATION:

; APPLICANT: McSwiggen, James

; TITLE OF INVENTION: Nucleic Acid Treatment of Diseases or Conditions Related to Level

; FILE REFERENCE: 400/057 (MBH01-1158-A)

; CURRENT FILING DATE: 2002-09-18

; PRIOR APPLICATION NUMBER: PCT/US 02/16840

; PRIOR FILING DATE: 2002-05-29

; PRIOR APPLICATION NUMBER: US 60/318,471

; NUMBER OF SEQ ID NOS: 4666

; SOFTWARE: PatentIn version 3.0

; SEQ ID NO 2821

; LENGTH: 17

; TYPE: RNA

; ORGANISM: Homo sapiens

US-10-238-700-2821

Query Match 2.8%; Score 12.8; DB 1; Length 17;

Best Local Similarity 75.0%; Pred. No. 2.7e+02;

Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 202 TCCCGGGACCTCGCG 217

:|||:|

Db 1 UCCCGGGCGCGCGG 16

RESULT 353

US-10-238-700-3508/c

; Sequence 3508. Application US/10238700

; Publication No. US20030153521A1

; GENERAL INFORMATION:

; APPLICANT: Ribozyme Pharmaceuticals, Inc.

; TITLE OF INVENTION: Nucleic Acid Treatment of Diseases or Conditions Related to Level

; FILE REFERENCE: 400/057 (MBH01-1158-A)

; CURRENT FILING DATE: 2002-09-18

; PRIOR APPLICATION NUMBER: PCT/US 02/16840

; PRIOR FILING DATE: 2002-05-29

; PRIOR APPLICATION NUMBER: US 60/318,471

; NUMBER OF SEQ ID NOS: 4666

; SOFTWARE: PatentIn version 3.0

; SEQ ID NO 3508

; LENGTH: 17

; TYPE: RNA

; ORGANISM: Homo sapiens

US-10-238-700-3508

Query Match 2.8%; Score 12.8; DB 1; Length 17;

Best Local Similarity 75.0%; Pred. No. 2.7e+02;

Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 202 TCCCGGGACCTCGCG 217

:|||:|

Db 1 UCCCGGGCGCGCGG 16

US-10-238-700-3508

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 226 CTGCCAGCCCGGAA 241  
|||||  
Db 17 CTGCCAGCCCGTAA 2

RESULT 354

US-10-061-201-715  
; Sequence 715, Application US/10061201  
; Publication No. US20030166229A1  
; GENERAL INFORMATION:  
; APPLICANT: Shannon, Mark  
; TITLE OF INVENTION: HUMAN POSH-LIKE PROTEIN 1  
; FILE REFERENCE: PB0178  
; CURRENT APPLICATION NUMBER: US/10/061,201  
; PRIOR FILING DATE: 2002-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00666  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00667  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00664  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00669  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00665  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00668  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00663  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00670  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: US 09/864,761  
; PRIOR FILING DATE: 2001-05-23  
; PRIOR APPLICATION NUMBER: US 60/328,205  
; PRIOR FILING DATE: 2001-10-10  
; NUMBER OF SEQ ID NOS: 4162  
; SOFTWARE: Aemica Sequence Listing Engine  
; SEQ ID NO 715  
; LENGTH: 17  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-10-061-201-715

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 272 CTTCTCCGAGGCACC 287  
|||||  
Db 2 CTTCTCCGAGACGC 17

RESULT 355

US-10-061-201-716  
; Sequence 716, Application US/10061201  
; Publication No. US20030166229A1  
; GENERAL INFORMATION:  
; APPLICANT: Shannon, Mark  
; TITLE OF INVENTION: HUMAN POSH-LIKE PROTEIN 1  
; FILE REFERENCE: PB0178  
; CURRENT APPLICATION NUMBER: US/10/061,201  
; PRIOR FILING DATE: 2002-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00666  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00667  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00664

; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00669  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00665  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00668  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00663  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: PCT/US01/00670  
; PRIOR FILING DATE: 2001-01-30  
; PRIOR APPLICATION NUMBER: US 09/864,761  
; PRIOR FILING DATE: 2001-05-23  
; PRIOR APPLICATION NUMBER: US 60/328,205  
; PRIOR FILING DATE: 2001-10-10  
; NUMBER OF SEQ ID NOS: 4162  
; SOFTWARE: Aemica Sequence Listing Engine  
; SEQ ID NO 716  
; LENGTH: 17  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-10-061-201-716

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 272 CTTCTCCGAGGCACC 287  
|||||  
Db 1 CTTCTCCGAGACGC 16

RESULT 356

US-10-230-006-1249/c  
; Sequence 1249, Application US/10230006  
; Publication No. US20030191077A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Fosnaugh, Kathy  
; APPLICANT: McSwiggen, Jim  
; TITLE OF INVENTION: METHOD AND REAGENT FOR THE TREATMENT OF ASTHMA AND ALLERGIC CONDIT  
; FILE REFERENCE: 400/056 (MBH01-1110)  
; CURRENT APPLICATION NUMBER: US/10/230,006  
; CURRENT FILING DATE: 2002-11-18  
; PRIOR APPLICATION NUMBER: US 60/315,315  
; PRIOR FILING DATE: 2001-08-28  
; NUMBER OF SEQ ID NOS: 2678  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 1249  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-10-230-006-1249

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 389 CCCC GCCGCGCGCG 404  
|||||  
Db 16 CTTCCGCCGCGCTCG 1

RESULT 357

US-10-230-006-1284  
; Sequence 1284, Application US/10230006  
; Publication No. US20030191077A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Fosnaugh, Kathy  
; APPLICANT: McSwiggen, Jim  
; TITLE OF INVENTION: METHOD AND REAGENT FOR THE TREATMENT OF ASTHMA AND ALLERGIC CONDIT  
; FILE REFERENCE: 400/056 (MBH01-1110)

; CURRENT APPLICATION NUMBER: US/10/230,006  
; CURRENT FILING DATE: 2002-11-18  
; PRIOR APPLICATION NUMBER: US 60/315,315  
; PRIOR FILING DATE: 2001-08-28  
; NUMBER OF SEQ ID NOS: 2678  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 1284  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-10-230-006-1284

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 68.8%; Pred. No. 2.7e+02;  
Matches 11; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

QY 182 GCTGCTGGCCGCTCG 197  
DB 2 GCUGCGGCGCGCUCG 17

RESULT 358  
US-10-430-882-899  
; Sequence 899, Application US/10430882  
; Publication No. US20030203870A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Lawrence Blatt  
; APPLICANT: James McSwiggen  
; APPLICANT: Bharat Chowira  
; APPLICANT: Peter Haeblerl  
; TITLE OF INVENTION: Method and Reagent for the Inhibition of NOGO and NOGO Receptor G  
; FILE REFERENCE: MBH800-878-H (400/112)  
; CURRENT APPLICATION NUMBER: US/10/430,882  
; CURRENT FILING DATE: 2003-05-06  
; PRIOR APPLICATION NUMBER: 09/827,395  
; PRIOR FILING DATE: 2001-04-05  
; PRIOR APPLICATION NUMBER: 09/780,533  
; PRIOR FILING DATE: 2001-02-09  
; PRIOR APPLICATION NUMBER: PCT/US01/04273  
; PRIOR FILING DATE: 2001-02-09  
; PRIOR APPLICATION NUMBER: 60/181,797  
; PRIOR FILING DATE: 2000-02-11  
; PRIOR APPLICATION NUMBER: PCT/US02/10512  
; PRIOR FILING DATE: 2002-04-03  
; NUMBER OF SEQ ID NOS: 2617  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 899  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-10-430-882-899

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 75.0%; Pred. No. 2.7e+02;  
Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 263 GCGCCGGGCTCTCC 278  
DB 2 GCGCCGGGCGUGUCC 17

RESULT 359  
US-10-068-1071/c  
; Sequence 1071, Application US/10297068  
; Publication No. US20030228585A1  
; GENERAL INFORMATION:  
; APPLICANT: INOKO, Hidetoshi  
; APPLICANT: KAGIYA, Taeko  
; APPLICANT: ICHIHARA, Tatsuao  
; APPLICANT: Matsumura, Yoshiyuki  
; APPLICANT: MORIYA, Shogo  
; APPLICANT: NISHIDA, Michio

; TITLE OF INVENTION: KIT AND METHOD FOR DETERMINING HLA TYPES  
; FILE REFERENCE: 13140P1174  
; CURRENT APPLICATION NUMBER: US/10/297,068  
; CURRENT FILING DATE: 2002-11-27  
; PRIOR APPLICATION NUMBER: JP 2000-164798  
; PRIOR FILING DATE: 2000-06-01  
; NUMBER OF SEQ ID NOS: 1298  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 1071  
; LENGTH: 17  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence:capture  
US-10-297-068-1071

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 379 CGGAGCGAGTCCCGC 394  
DB 16 CGGAGCCAGTCCACGC 1

RESULT 360  
US-10-307-005-751  
; Sequence 751, Application US/10307005  
; Publication No. US20030236208A1  
; GENERAL INFORMATION:  
; APPLICANT: University of Delaware  
; APPLICANT: Eric B. Kmiec  
; APPLICANT: Howard B. Gamper  
; APPLICANT: Michael C. Rice  
; APPLICANT: Jungsup Kim  
; TITLE OF INVENTION: Targeted Chromosomal Genomic Alterations in Plants  
; FILE REFERENCE: Napro/009 PCT  
; CURRENT APPLICATION NUMBER: US/10/307,005  
; CURRENT FILING DATE: 2002-11-26  
; PRIOR APPLICATION NUMBER: PCT/US01/17672  
; PRIOR FILING DATE: 2001-06-01  
; PRIOR APPLICATION NUMBER: US 60/208,538  
; PRIOR FILING DATE: 2000-06-01  
; PRIOR APPLICATION NUMBER: US 60/244,989  
; PRIOR FILING DATE: 2000-10-30  
; PRIOR APPLICATION NUMBER: US 09/818,875  
; PRIOR FILING DATE: 2001-03-27  
; NUMBER OF SEQ ID NOS: 2717  
; SOFTWARE: Friedman macro Napro4  
; SEQ ID NO 751  
; LENGTH: 17  
; TYPE: DNA  
; ORGANISM: Zea mays  
US-10-307-005-751

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 410 CTGAGCTGTGGAGCT 425  
DB 1 CTGAGCTGAGGCCCT 16

RESULT 361  
US-10-307-005-752/c  
; Sequence 752, Application US/10307005  
; Publication No. US20030236208A1  
; GENERAL INFORMATION:  
; APPLICANT: University of Delaware  
; APPLICANT: Eric B. Kmiec  
; APPLICANT: Howard B. Gamper

; APPLICANT: Michael C. Rice  
; APPLICANT: Jungsup Kim  
; TITLE OF INVENTION: Targeted Chromosomal Genomic Alterations in Plants  
; TITLE OF INVENTION: Using Modified Single Stranded Oligonucleotides  
; FILE REFERENCE: Napro/009 PCT  
; CURRENT APPLICATION NUMBER: US/10/307,005  
; CURRENT FILING DATE: 2002-11-26  
; PRIOR APPLICATION NUMBER: PCT/US01/17672  
; PRIOR FILING DATE: 2001-06-01  
; PRIOR APPLICATION NUMBER: US 60/208,538  
; PRIOR FILING DATE: 2000-06-01  
; PRIOR APPLICATION NUMBER: US 60/244,989  
; PRIOR FILING DATE: 2000-10-30  
; PRIOR APPLICATION NUMBER: US 09/818,875  
; PRIOR FILING DATE: 2001-03-27  
; NUMBER OF SEQ ID NOS: 2717  
; SOFTWARE: Friedman macro Napro4  
; SEQ ID NO 752  
; LENGTH: 17  
; TYPE: DNA  
; ORGANISM: Zea mays  
US-10-307-005-752

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 410 CTGAGCTGTGGGACGT 425  
Db 17 CTGAGCTGAGGGCCGT 2

RESULT 362  
US-10-342-902-1053/c  
; Sequence 1053, Application US/10342902  
; Publication No. US20040054156A1  
; GENERAL INFORMATION:  
; APPLICANT: Sinna Therapeutics, Inc.  
; APPLICANT: Draper, Kenneth  
; APPLICANT: Blatt, Larry  
; APPLICANT: McSwiggen, Jim  
; APPLICANT: Morrissey, Dave  
; TITLE OF INVENTION: Method and Reagent for Inhibiting Hepatitis B Virus Replication  
; FILE REFERENCE: 400/075 (MBH00-845-I)  
; CURRENT APPLICATION NUMBER: US/10/342,902  
; CURRENT FILING DATE: 2003-01-15  
; PRIOR APPLICATION NUMBER: US 09/877,478  
; PRIOR FILING DATE: 2001-06-08  
; PRIOR APPLICATION NUMBER: US 09/531,025  
; PRIOR FILING DATE: 2000-03-20  
; PRIOR APPLICATION NUMBER: US 09/536,385  
; PRIOR FILING DATE: 2000-08-09  
; PRIOR APPLICATION NUMBER: US 09/696,347  
; PRIOR FILING DATE: 2000-10-24  
; PRIOR APPLICATION NUMBER: US 08/193,627  
; PRIOR FILING DATE: 1994-02-07  
; PRIOR APPLICATION NUMBER: US 07/882,712  
; PRIOR FILING DATE: 1992-05-14  
; PRIOR APPLICATION NUMBER: US 09/436,430  
; PRIOR FILING DATE: 1999-11-08  
; NUMBER OF SEQ ID NOS: 6592  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 1053  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Hepatitis B virus  
US-10-342-902-1053

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 117 AGCGGCGGAGAAAGCC 132

Db 16 AGCGGCGGTAGAGCC 1  
RESULT 363  
US-10-138-674-8374/c  
; Sequence 8374, Application US/10138674  
; Publication No. US20040077565A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Pavco, Pam  
; APPLICANT: McSwiggen, Jim  
; APPLICANT: Stinchcomb, Dan  
; APPLICANT: Escobedo, Jaime  
; TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re  
; TITLE OF INVENTION: Levels of Vascular Endothelial Growth Factor Receptor  
; FILE REFERENCE: MBH00-876-N (400/049)  
; CURRENT APPLICATION NUMBER: US/10/138,674  
; CURRENT FILING DATE: 2002-05-03  
; NUMBER OF SEQ ID NOS: 20822  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 8374  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-10-138-674-8374

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 363 GCCGCAGGAGAGGAA 378  
Db 17 GCCGCAGGAGAGGAA 2

RESULT 364  
US-10-287-949A-8374/c  
; Sequence 8374, Application US/10287949A  
; Publication No. US20040102389A1  
; GENERAL INFORMATION:  
; APPLICANT: Ribozyme Pharmaceuticals, Inc.  
; APPLICANT: Pavco, Pam  
; APPLICANT: McSwiggen, Jim  
; APPLICANT: Stinchcomb, Dan  
; APPLICANT: Escobedo, Jaime  
; TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re  
; TITLE OF INVENTION: Levels of Vascular Endothelial Growth Factor Receptor  
; FILE REFERENCE: MBH00-876-N (400/049)  
; CURRENT APPLICATION NUMBER: US/10/287,949A  
; CURRENT FILING DATE: 2003-04-11  
; NUMBER OF SEQ ID NOS: 20822  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 8374  
; LENGTH: 17  
; TYPE: RNA  
; ORGANISM: Homo sapiens  
US-10-287-949A-8374

Query Match 2.8%; Score 12.8; DB 1; Length 17;  
Best Local Similarity 87.5%; Pred. No. 2.7e+02;  
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 363 GCCGCAGGAGAGGAA 378  
Db 17 GCCGCAGGAGAGGAA 2

RESULT 365  
US-10-712-672-757/c  
; Sequence 757, Application US/10712672  
; Publication No. US20040102413A1  
; GENERAL INFORMATION:

```
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Chowrira, Bharat
; APPLICANT: McSwiggen, Jim
; APPLICANT: Stinchcomb, Dan
; TITLE OF INVENTION: Method and Reagent for the Inhibition of Telomerase Enzyme
; FILE REFERENCE: MBH00-882-C (400/019)
; CURRENT APPLICATION NUMBER: US/10/712,672
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US/09/653,225
; PRIOR FILING DATE: 2000-08-31
; PRIOR APPLICATION NUMBER: 60/197,769
; PRIOR FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/150,713
; PRIOR FILING DATE: 1999-08-31
; NUMBER OF SEQ ID NOS: 5586
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 757
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-712-672-757

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 263 GCCCGGGGGCTTCTCC 278
Db 16 GCCTGGGGCTTCTCC 1

RESULT 366
US-10-712-672-1149/c
; Sequence 1149, Application US/10712672
; Publication No. US20040102413A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Chowrira, Bharat
; APPLICANT: McSwiggen, Jim
; APPLICANT: Stinchcomb, Dan
; TITLE OF INVENTION: Method and Reagent for the Inhibition of Telomerase Enzyme
; FILE REFERENCE: MBH00-882-C (400/019)
; CURRENT APPLICATION NUMBER: US/10/712,672
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US/09/653,225
; PRIOR FILING DATE: 2000-08-31
; PRIOR APPLICATION NUMBER: 60/197,769
; PRIOR FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/150,713
; PRIOR FILING DATE: 1999-08-31
; NUMBER OF SEQ ID NOS: 5586
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1149
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-712-672-1149

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 246 GCCTGAGCGCGGT 261
Db 16 GCCTGAGCGCGGT 1

RESULT 367
US-10-669-841-1053/c
; Sequence 1053, Application US/10669841
; Publication No. US20040127446A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
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; APPLICANT: Lawrence, Blatt
; APPLICANT: Dennis, Macejak
; APPLICANT: James, McSwiggen
; APPLICANT: David, Morrissey
; APPLICANT: Pamela, Pavco
; APPLICANT: Patrice, Lee
; APPLICANT: Kenneth, Draper
; APPLICANT: Elisabeth, Roberts
; TITLE OF INVENTION: OLIGONUCLEOTIDE MEDIATED INHIBITION OF HEPATITIS B VIRUS AND HEP
; FILE REFERENCE: 400/042US (MBH02-249-E)
; CURRENT APPLICATION NUMBER: US/10/669,841
; CURRENT FILING DATE: 2003-09-23
; PRIOR APPLICATION NUMBER: PCT/US02/09187
; PRIOR FILING DATE: 2002-03-26
; PRIOR APPLICATION NUMBER: US 60/296,876
; PRIOR FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: US 60/335,059
; PRIOR FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: US 60/337,055
; PRIOR FILING DATE: 2001-12-05
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 60/363,124
; PRIOR FILING DATE: 2002-03-11
; PRIOR APPLICATION NUMBER: US 09/817,879
; PRIOR FILING DATE: 2001-03-26
; PRIOR APPLICATION NUMBER: US 09/740,332
; PRIOR FILING DATE: 2000-12-18
; PRIOR APPLICATION NUMBER: US 09/611,931
; PRIOR FILING DATE: 2000-07-07
; PRIOR APPLICATION NUMBER: US 09/504,321
; PRIOR FILING DATE: 2000-02-15
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 16207
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1053
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Hepatitis B Virus
US-10-669-841-1053

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 117 AGCGGGCGGAAAGCC 132
Db 16 AGCGGGCGGTAGAGCC 1

RESULT 368
US-10-669-841-4018
; Sequence 4018, Application US/10669841
; Publication No. US20040127446A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: Lawrence, Blatt
; APPLICANT: Dennis, Macejak
; APPLICANT: James, McSwiggen
; APPLICANT: David, Morrissey
; APPLICANT: Pamela, Pavco
; APPLICANT: Patrice, Lee
; APPLICANT: Kenneth, Draper
; APPLICANT: Elisabeth, Roberts
; TITLE OF INVENTION: OLIGONUCLEOTIDE MEDIATED INHIBITION OF HEPATITIS B VIRUS AND HEP
; FILE REFERENCE: 400/042US (MBH02-249-E)
; CURRENT APPLICATION NUMBER: US/10/669,841
; CURRENT FILING DATE: 2003-09-23
; PRIOR APPLICATION NUMBER: PCT/US02/09187
; PRIOR FILING DATE: 2002-03-26
; PRIOR APPLICATION NUMBER: US 60/296,876
```

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; PRIOR FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: US 60/335,059
; PRIOR FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: US 60/337,055
; PRIOR FILING DATE: 2001-12-05
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 60/363,124
; PRIOR FILING DATE: 2002-03-11
; PRIOR APPLICATION NUMBER: US 09/817,879
; PRIOR FILING DATE: 2001-03-26
; PRIOR APPLICATION NUMBER: US 09/740,332
; PRIOR FILING DATE: 2000-12-18
; PRIOR APPLICATION NUMBER: US 09/611,931
; PRIOR FILING DATE: 2000-07-07
; PRIOR APPLICATION NUMBER: US 09/504,321
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 16207
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 4018
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
; SEQ ID NO 4018
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
; US-10-669-841-4018
```

```
Query Match 2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 75.0%; Pred. No. 2.7e+02;
Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;
```

```
QY 20 TGGAGGGGTGGGGC 35
Db 2 UGGAGGGGUGGGG 17
```

```
RESULT 369
US-10-669-841-6232/c
; Sequence 6232, Application US/10669841
; Publication No. US20040127446A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: Lawrence, Blatt
; APPLICANT: Dennis, Macejak
; APPLICANT: James, McSwiggen
; APPLICANT: David, Morrissey
; APPLICANT: Pamela, Pavco
; APPLICANT: Patrice, Lee
; APPLICANT: Kenneth, Draper
; APPLICANT: Elisabeth, Roberts
; TITLE OF INVENTION: OLIGONUCLEOTIDE MEDIATED INHIBITION OF HEPATITIS B VIRUS AND HEPA
; FILE REFERENCE: 400/042US (MBHB02-249-E)
; CURRENT APPLICATION NUMBER: US/10/669,841
; PRIOR FILING DATE: 2003-09-23
; PRIOR APPLICATION NUMBER: PCT/US02/09187
; PRIOR FILING DATE: 2002-03-26
; PRIOR APPLICATION NUMBER: US 60/296,876
; PRIOR FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: US 60/335,059
; PRIOR FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: US 60/337,055
; PRIOR FILING DATE: 2001-12-05
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: PCT/US02/09187
; PRIOR FILING DATE: 2002-03-26
; PRIOR APPLICATION NUMBER: US 60/296,876
; PRIOR FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: US 60/335,059
; PRIOR FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: US 60/337,055
; PRIOR FILING DATE: 2001-12-05
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 60/363,124
; PRIOR FILING DATE: 2002-03-11
; PRIOR APPLICATION NUMBER: US 09/817,879
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 16207
; SOFTWARE: PatentIn version 3.0
```

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; PRIOR FILING DATE: 2001-03-26
; PRIOR APPLICATION NUMBER: US 09/740,332
; PRIOR FILING DATE: 2000-12-18
; PRIOR APPLICATION NUMBER: US 09/611,931
; PRIOR FILING DATE: 2000-07-07
; PRIOR APPLICATION NUMBER: US 09/504,321
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 16207
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 6232
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
; US-10-669-841-6232
```

```
Query Match 2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 208 GGACCTGCGGGGTC 223
Db 16 GCACCTGCGGGGTC 1
```

```
RESULT 370
US-10-669-841-6348/c
; Sequence 6348, Application US/10669841
; Publication No. US20040127446A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: Lawrence, Blatt
; APPLICANT: Dennis, Macejak
; APPLICANT: James, McSwiggen
; APPLICANT: David, Morrissey
; APPLICANT: Pamela, Pavco
; APPLICANT: Patrice, Lee
; APPLICANT: Kenneth, Draper
; APPLICANT: Elisabeth, Roberts
; TITLE OF INVENTION: OLIGONUCLEOTIDE MEDIATED INHIBITION OF HEPATITIS B VIRUS AND HEPA
; FILE REFERENCE: 400/042US (MBHB02-249-E)
; CURRENT APPLICATION NUMBER: US/10/669,841
; PRIOR FILING DATE: 2003-09-23
; PRIOR APPLICATION NUMBER: PCT/US02/09187
; PRIOR FILING DATE: 2002-03-26
; PRIOR APPLICATION NUMBER: US 60/296,876
; PRIOR FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: US 60/335,059
; PRIOR FILING DATE: 2001-10-24
; PRIOR APPLICATION NUMBER: US 60/337,055
; PRIOR FILING DATE: 2001-12-05
; PRIOR APPLICATION NUMBER: US 60/358,580
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 60/363,124
; PRIOR FILING DATE: 2002-03-11
; PRIOR APPLICATION NUMBER: US 09/817,879
; PRIOR FILING DATE: 2001-03-26
; PRIOR APPLICATION NUMBER: US 09/740,332
; PRIOR FILING DATE: 2000-12-18
; PRIOR APPLICATION NUMBER: US 09/611,931
; PRIOR FILING DATE: 2000-07-07
; PRIOR APPLICATION NUMBER: US 09/504,321
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 16207
; SOFTWARE: PatentIn version 3.0
```

```
; SEQ ID NO 6348
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid
; NAME/KEY: misc_feature
; LOCATION:
; OTHER INFORMATION: oligonucleotide substrate
US-10-669-841-6348

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 433 GGACTCGGCTACACA 448
DB 17 GGACTGGGCCACACA 2

RESULT 371
US-10-712-633-3415/c
; Sequence 3415, Application US/10712633
; Publication No. US20040220128A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Pavco, Pamela
; APPLICANT: Sandberg, Jennifer
; APPLICANT: Gordon, Gilad
; APPLICANT: McSwiggen, James
; APPLICANT: Stinchcomb, Dan
; TITLE OF INVENTION: NUCLEIC ACID BASED MODULATION OF VASCULAR ENDOTHELIAL GROWTH FACT
; FILE REFERENCE: MBHB02-325PCT (400/047)
; CURRENT FILING DATE: 2003-11-13
; PRIOR APPLICATION NUMBER: US/10/712,633
; PRIOR FILING DATE: 2003-11-13
; PRIOR FILING DATE: 1995-10-26
; PRIOR APPLICATION NUMBER: US 08/584,040
; PRIOR FILING DATE: 1996-01-08
; PRIOR APPLICATION NUMBER: US 09/371,772
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: US 09/708,690
; PRIOR FILING DATE: 2000-11-07
; PRIOR APPLICATION NUMBER: US 09/870,161
; PRIOR FILING DATE: 2001-05-29
; PRIOR APPLICATION NUMBER: US 60/334,461
; PRIOR FILING DATE: 2001-11-30
; PRIOR APPLICATION NUMBER: US 10/138,674
; PRIOR FILING DATE: 2002-05-03
; NUMBER OF SEQ ID NOS: 5989
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3415
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo Sapiens
US-10-712-633-3415

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 363 GCCGAGGAGGAGGAA 378
DB 17 GCCGAGGAGGAGGAA 2

RESULT 372
US-10-724-270-1379/c
; Sequence 1379, Application US/10724270
; Publication No. US2005008031A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: Nucleic Acid Treatment of Diseases or Conditions Related to Level
; FILE REFERENCE: 400/046-US (MBHB02-326-A)
; CURRENT FILING DATE: 2003-11-26
; PRIOR APPLICATION NUMBER: US/10/724,270
; PRIOR FILING DATE: 2003-11-26
; PRIOR APPLICATION NUMBER: PCT/US02/16840
; PRIOR FILING DATE: 2002-05-29
; PRIOR APPLICATION NUMBER: US 60/318,471
; PRIOR FILING DATE: 2001-09-10
; PRIOR APPLICATION NUMBER: US 60/296,249
; PRIOR FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: US 60/294,140
; PRIOR FILING DATE: 2001-05-29
; PRIOR APPLICATION NUMBER: US 10/238,700
; PRIOR FILING DATE: 2002-09-10
; PRIOR APPLICATION NUMBER: US 10/163,552
; PRIOR FILING DATE: 2002-06-06
; PRIOR APPLICATION NUMBER: US 10/157,580
; PRIOR FILING DATE: 2002-05-29
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2002-10-23
```

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; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: Nucleic Acid Treatment of Diseases or Conditions Related to Level
; FILE REFERENCE: 400/046-US (MBHB02-326-A)
; CURRENT FILING DATE: 2003-11-26
; PRIOR APPLICATION NUMBER: PCT/US02/16840
; PRIOR FILING DATE: 2002-05-29
; PRIOR APPLICATION NUMBER: US 60/318,471
; PRIOR FILING DATE: 2001-09-10
; PRIOR APPLICATION NUMBER: US 60/296,249
; PRIOR FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: US 10/238,700
; PRIOR FILING DATE: 2002-09-10
; PRIOR APPLICATION NUMBER: US 10/163,552
; PRIOR FILING DATE: 2002-06-06
; PRIOR APPLICATION NUMBER: US 10/157,580
; PRIOR FILING DATE: 2002-05-29
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: US 10/417,012
; PRIOR FILING DATE: 2003-04-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 6810
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1379
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-724-270-1379

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 254 GCCGCGGTCCGCCGG 269
DB 16 GCCGCGGTCCGCCGG 1

RESULT 373
US-10-724-270-1500
; Sequence 1500, Application US/10724270
; Publication No. US2005008031A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; APPLICANT: McSwiggen, James
; TITLE OF INVENTION: Nucleic Acid Treatment of Diseases or Conditions Related to Level
; FILE REFERENCE: 400/046-US (MBHB02-326-A)
; CURRENT FILING DATE: 2003-11-26
; PRIOR APPLICATION NUMBER: PCT/US02/16840
; PRIOR FILING DATE: 2002-05-29
; PRIOR APPLICATION NUMBER: US 60/318,471
; PRIOR FILING DATE: 2001-09-10
; PRIOR APPLICATION NUMBER: US 60/296,249
; PRIOR FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: US 60/294,140
; PRIOR FILING DATE: 2001-05-29
; PRIOR APPLICATION NUMBER: US 10/238,700
; PRIOR FILING DATE: 2002-09-10
; PRIOR APPLICATION NUMBER: US 10/163,552
; PRIOR FILING DATE: 2002-06-06
; PRIOR APPLICATION NUMBER: US 10/157,580
; PRIOR FILING DATE: 2002-05-29
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2002-10-23
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; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: US 10/417,012
; PRIOR FILING DATE: 2003-04-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 6810
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1500
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-724-270-1500

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 75.0%; Pred. No. 2.7e+02;
Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 202 TCCCGGCGACCTCGCG 217
   :|||:|||:|||
Db 1 UCCUGGGCGCG 16

RESULT 374
US-10-724-270-2187/c
; Sequence 2187, Application US/10724270
; Publication No. US20050080031A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; TITLE OF INVENTION: Nucleic Acid Treatment of Diseases or Conditions Related to Level
; FILE OF INVENTION: RAS, HER2 and HIV
; FILE REFERENCE: 400/046-US (MBH02-326-A)
; CURRENT APPLICATION NUMBER: US/10/724,270
; CURRENT FILING DATE: 2003-11-26
; PRIOR APPLICATION NUMBER: PCT/US02/16840
; PRIOR FILING DATE: 2002-05-29
; PRIOR APPLICATION NUMBER: US 60/318,471
; PRIOR FILING DATE: 2001-09-10
; PRIOR APPLICATION NUMBER: US 60/296,249
; PRIOR FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: US 60/294,140
; PRIOR FILING DATE: 2001-05-29
; PRIOR APPLICATION NUMBER: US 10/238,700
; PRIOR FILING DATE: 2002-09-10
; PRIOR APPLICATION NUMBER: US 10/163,552
; PRIOR FILING DATE: 2002-06-06
; PRIOR APPLICATION NUMBER: US 10/157,580
; PRIOR FILING DATE: 2002-05-29
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: US 10/417,012
; PRIOR FILING DATE: 2003-04-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 6810
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 4675
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-724-270-4675

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 21 GCGAGGGGTGTGGCC 36
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Db 17 GCGAGGGGTGTGGCC 2

RESULT 376
US-10-724-270-5524/c
; Sequence 5524, Application US/10724270
; Publication No. US20050080031A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; TITLE OF INVENTION: Nucleic Acid Treatment of Diseases or Conditions Related to Level
; FILE OF INVENTION: RAS, HER2 and HIV
; FILE REFERENCE: 400/046-US (MBH02-326-A)
; CURRENT APPLICATION NUMBER: US/10/724,270
; CURRENT FILING DATE: 2003-11-26
; PRIOR APPLICATION NUMBER: PCT/US02/16840
; PRIOR FILING DATE: 2002-05-29
; PRIOR APPLICATION NUMBER: US 60/318,471
; PRIOR FILING DATE: 2001-09-10
; PRIOR APPLICATION NUMBER: US 60/296,249
; PRIOR FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: US 60/294,140
; PRIOR FILING DATE: 2001-05-29
; PRIOR APPLICATION NUMBER: US 10/238,700
; PRIOR FILING DATE: 2002-09-10
; PRIOR APPLICATION NUMBER: US 10/163,552
; PRIOR FILING DATE: 2002-06-06
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; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: US 10/417,012
; PRIOR FILING DATE: 2003-04-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 6810
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1500
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-724-270-1500

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 75.0%; Pred. No. 2.7e+02;
Matches 12; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 202 TCCCGGCGACCTCGCG 217
   :|||:|||:|||
Db 1 UCCUGGGCGCG 16

RESULT 374
US-10-724-270-2187/c
; Sequence 2187, Application US/10724270
; Publication No. US20050080031A1
; GENERAL INFORMATION:
; APPLICANT: Sirna Therapeutics, Inc.
; TITLE OF INVENTION: Nucleic Acid Treatment of Diseases or Conditions Related to Level
; FILE OF INVENTION: RAS, HER2 and HIV
; FILE REFERENCE: 400/046-US (MBH02-326-A)
; CURRENT APPLICATION NUMBER: US/10/724,270
; CURRENT FILING DATE: 2003-11-26
; PRIOR APPLICATION NUMBER: PCT/US02/16840
; PRIOR FILING DATE: 2002-05-29
; PRIOR APPLICATION NUMBER: US 60/318,471
; PRIOR FILING DATE: 2001-09-10
; PRIOR APPLICATION NUMBER: US 60/296,249
; PRIOR FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: US 60/294,140
; PRIOR FILING DATE: 2001-05-29
; PRIOR APPLICATION NUMBER: US 10/238,700
; PRIOR FILING DATE: 2002-09-10
; PRIOR APPLICATION NUMBER: US 10/163,552
; PRIOR FILING DATE: 2002-06-06
; PRIOR APPLICATION NUMBER: US 10/157,580
; PRIOR FILING DATE: 2002-05-29
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: US 10/417,012
; PRIOR FILING DATE: 2003-04-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 6810
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2187
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-724-270-2187

Query Match          2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 226 CTGCCAGCCCGCGAA 241
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Db 17 CTGCCAGCCCGCGAA 2

RESULT 375
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; PRIOR APPLICATION NUMBER: US 10/157,580
; PRIOR FILING DATE: 2002-05-29
; PRIOR APPLICATION NUMBER: US 10/693,059
; PRIOR FILING DATE: 2002-10-23
; PRIOR APPLICATION NUMBER: US 10/444,853
; PRIOR FILING DATE: 2003-05-23
; PRIOR APPLICATION NUMBER: US 10/417,012
; PRIOR FILING DATE: 2003-04-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 6810
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 5524
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-724-270-5524
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Query Match      2.8%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 2.7e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      6 GCGGAGGGGTGGGCGCTG 21
      | | | | | | | | | | | | | | |
Db     17 GAGGAGGGGTGGGCGCTG 2
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Search completed: August 24, 2005, 14:36:14  
Job time : 4 secs

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